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NEVADA BLM STATEWIDE WILDERNESS REPORT

JULY 1990

VOLUME III
WINNEMUCCA DISTRICT

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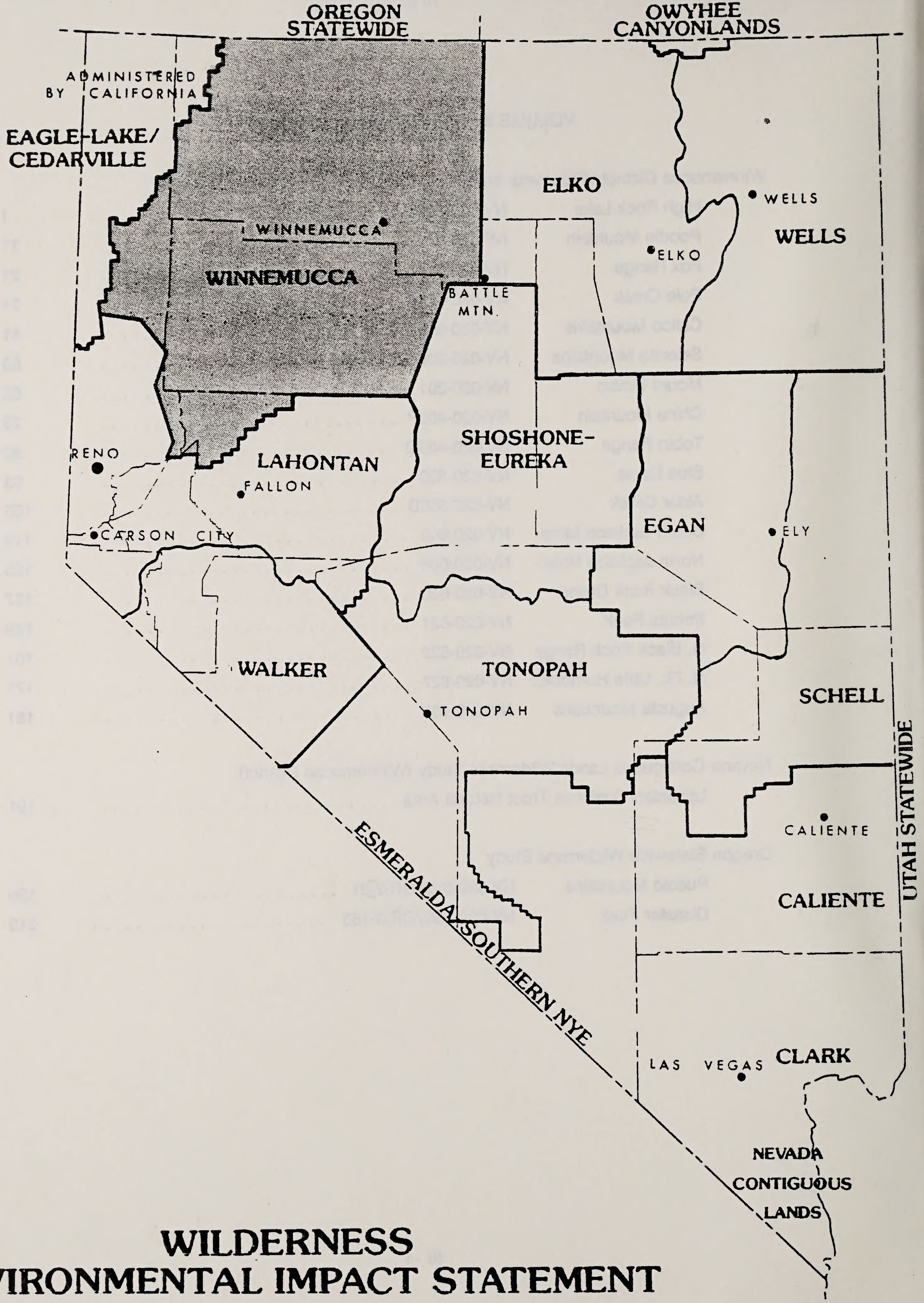
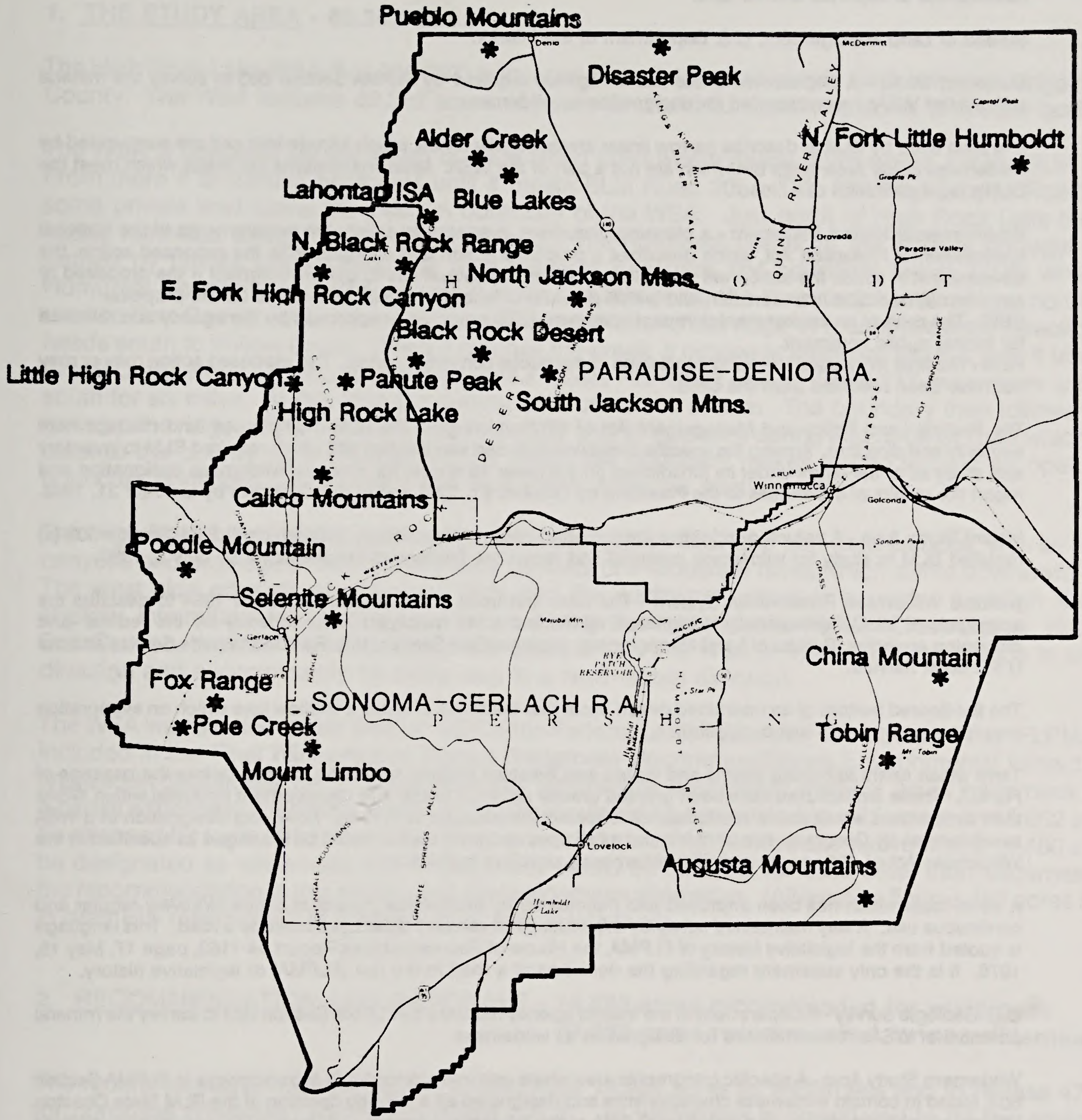


WILDERNESS ENVIRONMENTAL IMPACT STATEMENT AREAS



WINNEMUCCA DISTRICT

GLOSSARY

Bajada	A broad alluvial slope extending from the base of a mountain range out into a basin and formed by a coalescance of separate alluvial fans.
BLM	Bureau of Land Management, U.S. Department of the Interior.
BOM	Bureau of Mines - A Department of the Interior agency required by FLPMA Section 603 to survey the mineral potential of WSAs recommended for designation as wilderness.
Cherrystem	The term used by BLM to describe narrow linear areas, usually roads, which intrude into and are surrounded by Wilderness Study Area lands but which are not a part of the WSA. Most cherrystems are roads which meet the BLM's legal definition of a "road".
EIS	Environmental Impact Statement - a planning document, prepared to satisfy the requirements of the National Environmental Protection Act, which describes a proposed action and alternatives to the proposed action, the environment in which the action will take place, and the consequences to the environment if the proposed or any alternative action is undertaken and which provides a record of public comments on the proposal. DEIS - The draft of an environmental impact statement (EIS) prepared or approved by the agency and released for formal public comment. FEIS - The final EIS issued following conclusion of the public comment period. The proposed action may or may not have been modified from the DEIS.
FLPMA	The Federal Land Policy and Management Act of 1976 which gave the BLM multiple use land management authority and direction. Among the specific directions included was Section 603 which required BLM to inventory and study all of the lands under its jurisdiction (in the lower 48 states) for potential wilderness designation and report the results of the studies to the President by October 21, 1991 and to the Congress by October 21, 1993.
ISA	Instant Study Area - A natural or primitive area existing before November 1, 1975 which FLPMA Section 603 (a) required BLM to study for wilderness potential and report the findings to the President by July 1, 1980.
NWPS	National Wilderness Preservation System - The term first used in the Wilderness Act of 1964 to describe the aggregate of all Congressionally designated wilderness areas managed independently by the federal land managing agencies (Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service and the U.S. Forest Service.
Playa	The flat-floored bottom of an undrained desert basin that becomes at times a shallow lake which on evaporation may leave a deposit of salt or gypsum.
Pre-FLPMA	Term which refers to mining claims and leases and livestock grazing privilages existing before the passage of FLPMA. These limited uses have been granted greater rights of usage and development potential within WSAs than similar uses which came into existence following the passage of FLPMA. Following designation of a WSA as wilderness by Congress, this term is moot as all uses and prior claims would be managed as specified in the Wilderness Act of 1964 or the specific wilderness's enabling legislation.
Road	A travel route which has been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road. This language is quoted from the legislative history of FLPMA, the House of Representatives Report 94-1163, page 17, May 15, 1976. It is the only statement regarding the definition of a road in the law (FLPMA) or legislative history.
USGS	U.S. Geologic Survey - A Department of the Interior agency required by FLPMA Section 603 to survey the mineral potential of WSAs recommended for designation as wilderness.
WSA	Wilderness Study Area - A specific geographic area which was inventoried by BLM in response to FLPMA Section 603, found to contain wilderness characteristics and designated as a WSA by decision of the BLM State Director. Wilderness characteristics, as defined by FLPMA or the Wilderness Act are 1) At least 5,000 contiguous roadless acres of public lands, 2) Natural, the imprint of man's work must be substantially unnoticeable, 3) Possessing either an outstanding opportunity for solitude or for a primitive and unconfined type of recreation and 4) May also contain ecological, geological, or other features of scientific, educational, scenic or historical value.

HIGH ROCK LAKE WILDERNESS STUDY AREA

1. THE STUDY AREA - 62,382 acres

The High Rock Lake WSA (NV-020-007) is located in northwestern Nevada on the western edge of Humboldt County. The WSA includes 62,382 acres of public land and surrounds 80 acres of private lands (Table 1).

The WSA is bordered on the south by BLM Road 2088 which heads north where it joins BLM Road 2053. From there it continues northwest until it meets BLM Road 2054. This Smokey Canyon Road along with some private land forms the western boundary of the WSA. Just north of High Rock Lake the boundary heads northeast along the Fly Canyon Road. The northeast corner of the WSA is on legal boundaries formed by private lands. Near the Mud Meadow Reservoir, the boundary heads south where it meets Humboldt County Road 217 for about 3 miles. At this point, the boundary heads up the northern access road to Box Canyon until it leaves the canyon and follows the ridge in a southwesterly direction and then heads south to Willow Creek. When it reaches the creek, it proceeds eastward along it until it hits the Willow Creek Corral Road. It follows this road until it meets Humboldt County Road 217 once more and continues south for six miles. At this time the county road crosses a stream. The boundary then follows the stream, goes up the ridge above its headwaters westerly until it reaches a spring and another road which leads east back to the county road once again. In effect, the boundary makes a loop around an opal mine. The boundary continues south, until it hits BLM Road 2088, the starting point.

The High Rock Lake WSA is part high plateau, part desert floor and part mountainous, with its sides cut by canyons and drainages. Much of the area consists of a moderate mesa which slants downward to the east. The west side consists of a rimrock bluff and the northwest corner is occupied by High Rock Lake, a shallow, intermittent lake that often dries up during summer months. Willow Creek Gorge, also known as Box Canyon, crosses the north end of the study area. The WSA is from 4 to 7 miles wide in an east-west direction and approximately 18 miles long in a north-south direction.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement finalized in September 1987. There were four alternatives analyzed in the EIS: an all wilderness alternative; a partial wilderness alternative where 54,380 acres would be designated as wilderness and 8,002 acres would be released for uses other than wilderness; a second partial wilderness alternative where 14,480 acres would be designated as wilderness and 47,902 acres would be released for uses other than wilderness, which is the recommendation in this report; and a no wilderness alternative. (Alternative figures 480 acres higher than in draft EIS reflecting BLM acquisition of split-estate lands.

2. RECOMMENDATION AND RATIONALE - 14,480 acres recommended for wilderness
47,902 acres recommended for nonwilderness

The recommendation for this WSA is to designate 14,480 acres as wilderness and to release 47,902 acres for purposes other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation for this WSA would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

A portion of the area is recommended for wilderness because of its high wilderness values. This area is natural because of its undeveloped landscapes, rugged canyons and lack of human impacts. This area also has opportunities for primitive and unconfined recreation and offers outstanding solitude. There are a number of features that would bring the visitor here. Such as wild horses, scenic attractions, a portion of an historic wagon trail with an accompanying wagon slide and examples of various geologic formations.

There are few conflicting resource uses within the area recommended for wilderness. No geothermal or oil and gas leases are present but there are 120 acres of mining claims on the edge of this portion. The development potential for these claims is considered low.

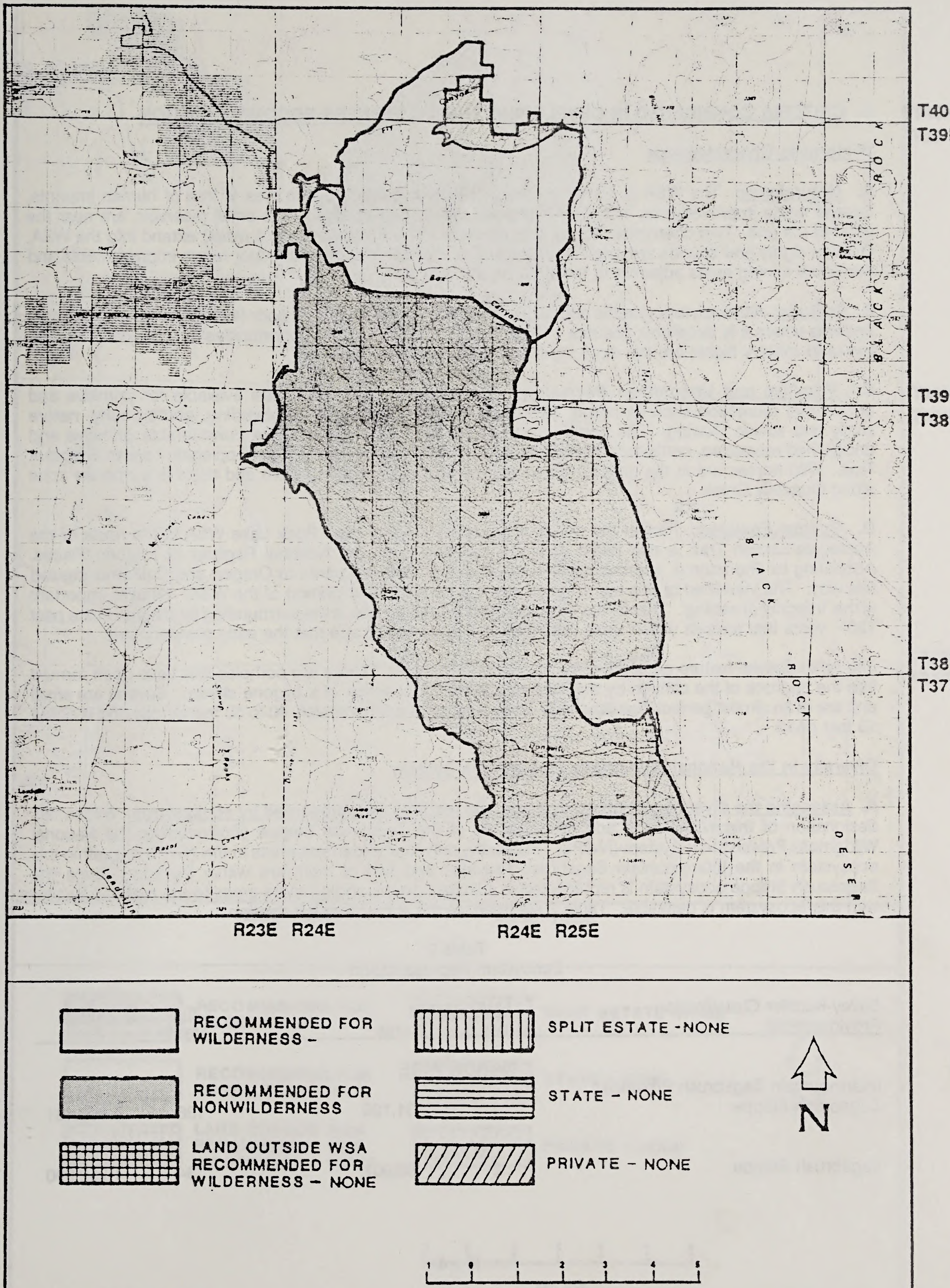
The recommendation for the High Rock Lake WSA emphasizes maintaining access to a portion of the WSA for mineral exploration and extraction. Large portions of the WSA have potential for the occurrence of a diverse group of mineral resources including geothermal, hardrock locatable minerals and precious opal. There is a high potential for opal and geothermal steam. In addition there is moderate potential for occurrence of gold, silver, antimony, zinc, molybdenum and mercury. Antimony, zinc and mercury are listed as Strategic and Critical Materials.

The recommendation permits exploration and development of these energy resources. The high and moderate potential for occurrence of a diversity of mineral resources in the different parts of the WSA combined with the interest in the area (600 acres of mining claims and 5,935 acres under oil and gas lease) is sufficient evidence to conclude that in the future this area could produce significant quantities of important mineral resources.

The development and extraction of mineral resources in this WSA will cause the loss of wilderness values. Development of some or all of the 600 acres of mineral claims would occur with or without wilderness designation since these are all pre-FLPMA claims. Other mineral exploration and development would probably affect an additional 28,000 acres or more of the WSA. It was felt that this recommendation would incorporate the area with the highest wilderness values while excluding those portions with the highest mineral values. It is projected that even after mineral exploration much of the area will retain wilderness characteristics.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	61,902
Split Estate (BLM surface only)	480
Inholdings (State, Private)	80
Total	62,462
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	14,000
BLM (Outside WSA)	0
Split Estate (Within WSA)	480
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	14,480
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	47,902
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	47,902
Inholdings (State, Private)	80



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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The WSA is primarily natural; nearly two-thirds of the area is free of human imprints. Several range improvements, including fencelines, developed springs and a small reservoir, are near the edge of the unit. Two cherrystem roads (2.3) miles and 10 vehicle ways (13.4 miles) extend into the WSA. Outside sights and sounds are primarily restricted to light vehicular traffic, minor range improvements and two small mining areas adjacent to the WSA on the east side.

B. Solitude: Although topographic and vegetative screening are relatively poor (except in the major canyon systems where it is excellent), the size of High Rock Lake WSA allows opportunities for solitude. Regular, low-level military flights are the most significant detractors from solitude.

C. Primitive and Unconfined Recreation: Outstanding opportunities are available for primitive and unconfined recreation such as hiking, backpacking, rock climbing, rock hounding, photography, nature study and scenic viewing. The northern end of the WSA currently receives considerable primitive and unconfined recreation, particularly hiking, nature study and historic study of the Applegate-Lassen Emigrant Trail. Wild horses are in the area for those people who enjoy viewing them and there is a riparian zone along Donnelly Creek.

D. Special Features: Part of the northern boundary road of High Rock Lake WSA is the route of the Applegate-Lassen Trail, a mid-1800s emigrant trail that is on the National Register of Historic Places. According to one source, approximately one-half of the 1849 emigrants to Oregon and California passed this way. The viewshed of this trail extends into the northernmost portion of the WSA. What is important is the 'integrity of setting'. That is, the scenery has changed so little in the surrounding landscape in the past 130+ years that today's viewer sees essentially the same landscape that the early pioneers saw.

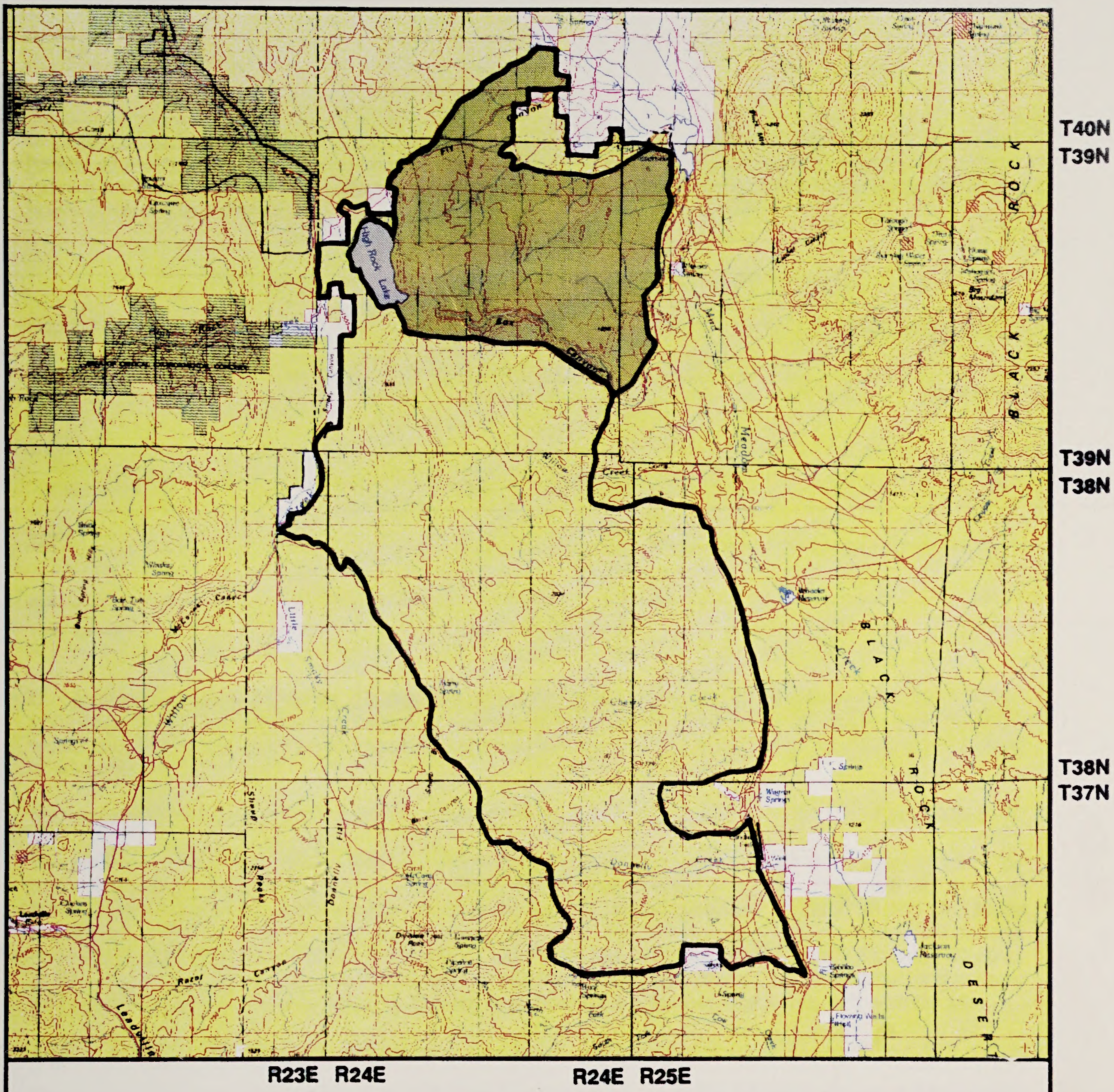
The other special feature consists of the Fly Canyon Potholes. These are potholes that have been formed into the bedrock of the canyon by the swirling and whirlpool action of a bygone stream. Several are small and are of an almost perfect circular shape, while another is approximately 40 to 50 feet across and is about 10 feet deep.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 62,382 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, only four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,461
	NEVADA			
Sagebrush Steppe	2	86,907	34	1,252,990



▨ RECOMMENDED FOR WILDERNESS -

☐ RECOMMENDED FOR NONWILDERNESS

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE

▥ SPLIT ESTATE - NONE

▤ STATE - NONE

▧ PRIVATE - NONE

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B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039
Oregon				
Medford	31	2,440,081	21	730,038

C. Balancing the geographic distribution of wilderness areas: The High Rock Lake WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The portion of the WSA recommended for wilderness designation can reasonably be managed as wilderness to preserve values now present in the area. There are no private lands or leases. There are 120 acres of mining claims with valid existing rights but they are located on the perimeter of the WSA and should be manageable. There will be management concerns about the ORV accessibility (15% of entire WSA) and the one mile of way. The remainder of the High Rock Lake WSA has manageability problems including 80 acres of inholdings. Management concerns will also be associated with 85% of the ORV accessible land present and the 15 miles of roads and ways. Currently, rock hounds are the heaviest users of the study area.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) a U.S. Geogolgic Survey/Bureau of Mines Report on the potential of the area recommended for wilderness and (7) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 26,200 acres of land with moderate potential for metallic minerals (gold, silver, antimony*, zinc*, molybdenum and mercury*), 18,900 acres of land with high potential for a nonmetallic mineral (precious opal), 43,496 acres with moderate potential for a nonmetallic mineral (precious opal), 18,800 acres with high potential for geothermal steam and 6,300 acres with moderate potential for geothermal steam. No geothermal leases are currently in the High Rock Lake WSA. There are 600 acres of mining claims with valid existing rights. Ten percent of the WSA (5,935) acres are under oil and gas lease. There is no present production of any mineral or geothermal resources in the study area.

The U.S. Geological Survey, in conjunction with the Bureau of Mines, completed a survey of the area recommended for wilderness. As a result of that survey, they concluded that the potential for mineral or energy resources is low.

In summary, quantities of any various minerals are unknown, but the potential for occurrence is from moderate to high in several parts of the WSA as identified in the Environmental Impact Statement.

Impacts on Resources

The comparative impact table (Table 4) on the following pages summarizes the effects of pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 14 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were these: opportunities for solitude, spectacular scenery and the Applegate-Lassen Trail. Reasons given for opposing wilderness study area status were the following: other resource values, roads, intrusions and lack of outstanding opportunities for solitude.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Two oral comments were received and 97 written ones. Both of the oral comments supported less wilderness than that recommended in the draft EIS (14,000 acres recommended for wilderness designation); twenty-one of the written comments took this same position. Twelve of the written comments supported the proposed action and 64 people supported more wilderness than that was recommended. About ninety percent of those opposing wilderness designation were rock hounds; the others were campers, who wanted to preserve access, and mining interests. All known rock hounding areas were excluded during the study process and are not in the portion recommended for wilderness designation. Those people who were in favor of wilderness mentioned the historic Applegate-Lassen Trail, the Pot Holes, Fly Canyon and other scenic opportunities as well as the desirability of preserving the area from mining and other development.

No comments about wilderness were received from Humboldt County agencies or officials.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We agree with the BLM that parts of this WSA meet wilderness requirements. There are resource conflicts with wilderness designation, especially conflicts with geothermal resources in the northern part of the WSA. There is also a natural feature know [sic] as the potholes in the northern part of the WSA which is felt by many to deserve special protection. Considering the information available to us at the present time, we concur with your preferred alternative recommending continued consideration of some 14,000 acres of this WSA." The letter was in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions were placed on military flights. It said it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)	No Wilderness
Impacts on Wilderness Values	Wilderness values would be preserved on 14,000 acres designated as wilderness. The special features, Fly Canyon potholes, High Rock Lake, Box Canyon and Applegate-Lassen Viewshed are within the 14,000 acres recommenmded for wilderness.	Naturalness, solitude, and primitive recreation preserved within the WSA except for 60 acres on which valid mineral discoveries, Willow Creek zone (20 acres) and Donnelly Creek zone (40 acres) are projected. The special features - Fly Canyon potholes, High Rock Lake, Box Canyon and Applegate-Lassen Viewshed would receive long term protection.	Wilderness values would be preserved on 53,900 acres. The special features - Fly Canyon potholes, High Rock Lake, Box Canyon and Applegate-Lassen Viewshed - are all within the 53,900 acres recommended for wilderness.	No special features would receive long-term protection from ORV use, energy and mineral activity and vegetative manipulation.
	Naturalness would be impaired on approximately 19% or 14,415 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.		Naturalness would be impaired on approximately 52% or 4,165 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.	Naturalness would be impaired on approximately 23% or 14,435 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.
	Solitude would be adversely impacted on approximately 3% or 1,615 acres from increased ORV use, energy and mineral activity and vegetative manipulation.		Solitude would be adversely impacted in approximately 17% or 1,400 acres from increased ORV use, energy and mineral activity and vegetative manipulation.	Solitude would be adversely impacted in approximately 3% or 1,955 acres from increased ORV use, energy and mineral activity and vegetative manipulation.
	Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.		Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.	Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.
Impacts on Range Condition	In the area recommended for wilderness, no range improvement projects would occur. There would be no change in range condition. In the area not recommended for wilderness, the 3,320 acre proposed vegetative manipulation would be permitted, resulting in an improvement in range condition.	The 3,320 acre proposed vegetative manipulation project would not occur. There would be no improvement in range condition.	In the area recommended for wilderness, no range improvement projects would occur. There would be no change in range condition. In the area not recommended for wilderness, approximately 1,120 acres proposed for vegetative manipulation would be treated, resulting in an improvement in range condition.	The 3,320 acre proposed vegetative manipulation would occur resulting in an improvement in range conditions.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)	No Wilderness
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Base-precious metal exploration opportunities would be foregone in the designated wilderness. Projected base-precious metal exploration and development of 3 small opal mines would occur in the area not designated as wilderness.	The impact would be the foregone base-precious metal exploration opportunities. No impact would occur on development of 3 precious opal mines.	Base-precious metal exploration opportunities would be foregone. Projected base-precious metal exploration and development of 2 small precious opal mines would be allowed in the designated wilderness due to valid discoveries on predesignation claims. Projected base-precious metal exploration and development of 1 small precious opal mine would occur in the nonwilderness area.	Projected base-precious metal exploration and development of 3 small precious opal mines would occur.
Impacts on the Level of Exploration for Geothermal Resources	Geothermal exploration opportunities would be foregone in the area designated as wilderness. Projected geothermal exploration and development of 2 small geothermal well pads and 2 small space heating wells would occur in the area not recommended for wilderness.	Geothermal exploration and development of 2 small geothermal well pads and 2 small space heating wells would be foregone.	Geothermal exploration and development of 1 small space heating well would be foregone in the area designated as wilderness. Projected geothermal exploration and development of 2 small geothermal well pads and 1 well space heating well would occur in the area not recommended for wilderness.	Projected geothermal exploration and development of 2 small geothermal well pads and 2 small space heating wells would occur.
Impacts on Motorized Recreational Vehicle Use	10 visitor hours of present annual ORV use and 20 hours of foreseeable future use would be displaced. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the present 50 visitor hours to 120 hours per year.	Sixty visitor hours of present ORV use and 140 hours of projected future use would be displaced annually. This use would be easily absorbed on adjacent lands.	Forty visitor hours of present annual ORV use and 90 hours of foreseeable future use would be displaced. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the present 20 visitor hours to 60 hours annually.	ORV use would grow from the present 60 visitor hours to 140 hours annually.

POODLE MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA - 142,050 acres

The Poodle Mountain WSA (NV-020-012) is located in central Washoe County, approximately 15 miles northwest of Gerlach, Nevada. Reno, Nevada is about a 2-hour drive away. The WSA includes 142,050 acres of public lands and surrounds 3,226 acres of private land and 480 acres of split estate (private surface-public minerals) (Table 1).

The WSA boundary is bordered by roads (57.1 miles), private land (22.7 miles) and topographic features (2.5 miles). The study area is bordered on the southeast and south by the Sand Pass Road, on the southwest by the Smoke Creek Road leading into private land on the west, on the northwest by the North Fork Creek Road and portions of private land, on the north by the Buffalo Hills Reservoirs Road and a portion of private land and on the northeast by the road identified as State Highway 81 intermixed with parcels of private land and on the east by private land.

The Poodle Mountain WSA is generally circular, measuring between 4 and 21 miles north-south and between 3 and 18 miles east-west. It encompasses most of the Buffalo Hills, a circular shaped basaltic plateau dominated by large canyons generally radiating from the center. The elevations for the WSA range between 3,850 feet to 6,832 feet. There are three distinct landforms to be found: basalt plateau highlands, basalt plateau canyon country, and fringing desert piedmont.

The basalt plateau highlands are in the north-central and northwest part and are flat to rolling with a small area of alluvium. This section includes Poodle Mountain, the volcanic vent from which the Buffalo Hills basalt issued. The plateau highlands are only moderately eroded compared to the canyon country around them.

The basalt plateau canyon country has numerous deeply-cut canyons and gorges. This section of the WSA includes finger-like, flat-topped ridges and remnant plateaus between the canyons. The landscape is extremely rugged, rocky and has high-relief as compared to the low-relief highland plateau from which it radiates.

The fringing desert piedmont is along the south and southwestern boundary and is the transition between the Buffalo Hills and the Smoke Creek Desert to the south. The landscape is low-relief alluvium with low parallel ridges and drainages lying perpendicular to the basalt plateau.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative in which 87,900 acres would be recommended for wilderness designation and 54,150 acres would be released for uses other than wilderness and a no wilderness alternative which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 142,050 acres recommended for nonwilderness

The recommendation for this WSA is to release all 142,050 acres for uses other than wilderness (Maps 1 & 2). All Wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. Although the recommendation is not the All Wilderness alternative, the recommendation for this WSA would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

This WSA is recommended for uses other than wilderness due to a compilation of factors which, individually might not cause the study area to be unsuitable for wilderness designation, but collectively, create a situation where the recommendation is for no wilderness. There is an extensive and expansive amount of private land. Three thousand seven hundred and six acres of private land are spread throughout the WSA. This acreage would be of minimal significance if it were clustered together but it is spread out through 38 different parcels. These pieces of private land control the available water. The owner has the right of reasonable access to these parcels at any time. It would be impossible to manage for wilderness values.

There are a large number of range improvements in the WSA and they are widely scattered. Each of these improvements would be allowed under the wilderness management policy. This would require that vehicle access be allowed for the maintenance of these projects. The country is such that vehicular access for this maintenance would keep cherrystem roads and ways in existence and this would lower the natural quality of the area.

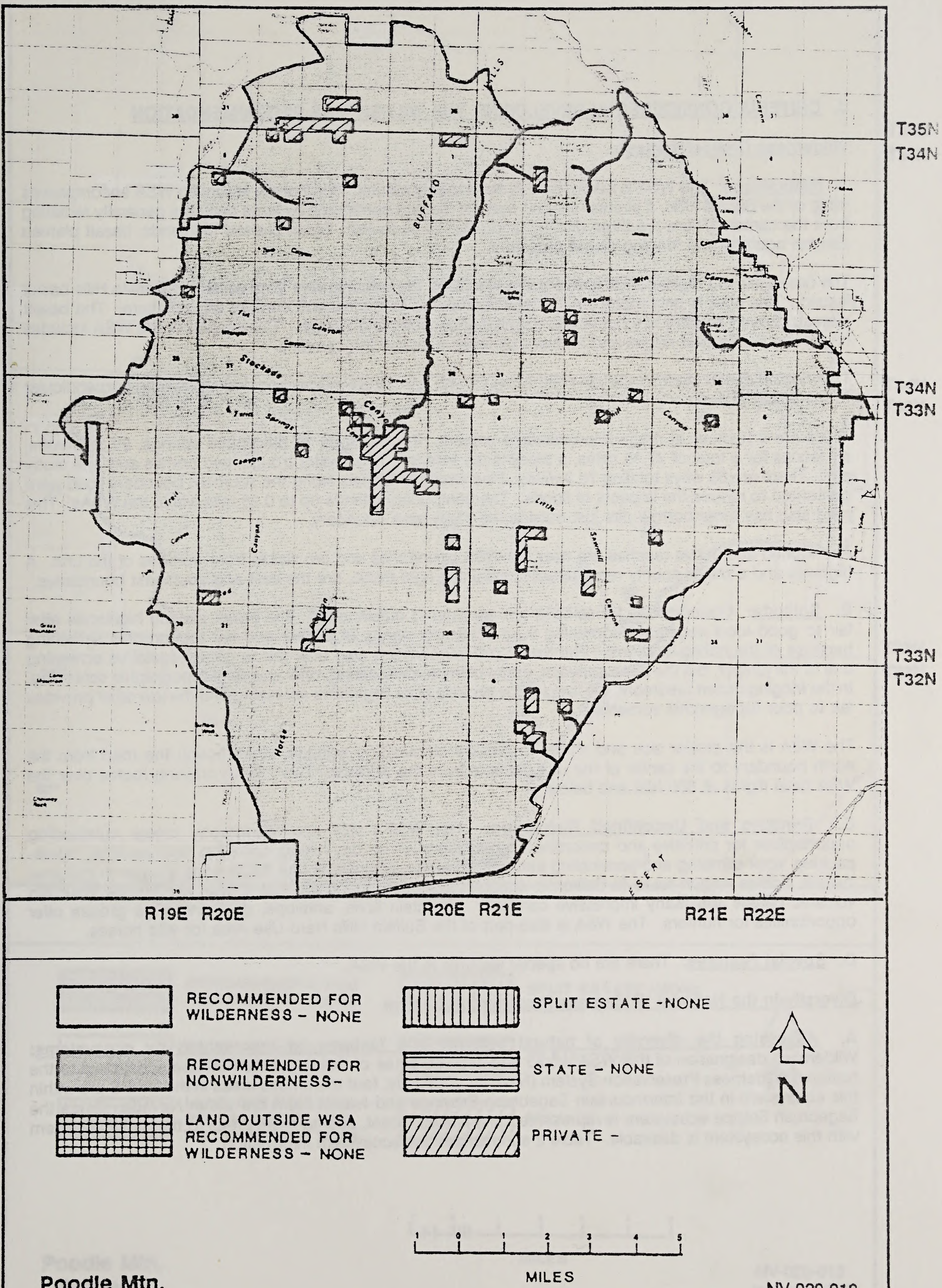
Another manageability problem concerns the 1,400 acres of mining claims present. It is projected that 65 acres of them will be developed. The audio and visual intrusions caused by the development of any of these acres would reduce the wilderness characteristics of the immediate area. These developments would include, but not be limited to, noise caused by engines and the normal day to day operation of a mining enterprise. Dust, buildings, vehicles and diggings would lessen the wilderness experience. Since the BLM is required to provide reasonable access to individuals with valid, preFLPMA mining claims, construction of access roads through the area would be an additional erosion of wilderness values.

There are also 28,300 acres with moderate metallic mineral potential (mercury, uranium, tungsten and silver). In addition to these, there are 24,000 acres of moderate geothermal potential.

In summary, while the individual manageability concerns of each of these issues would not be of sufficient cause to recommend this WSA for nonwilderness, the aggregate of all of these concerns does. Therefore, this WSA is not recommended for wilderness.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	142,050
Split Estate (BLM surface only)	0
Inholdings (State, Private)	3,706
Total	145,756
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	142,050
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	142,050
Inholdings (State, Private)	3,706



**Poodle Mtn.
Proposal**

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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The WSA is considered to be primarily natural. The Poodle Mountain WSA encompasses most of the Buffalo Hills, a circular shaped basaltic plateau dominated by large canyons generally radiating from the center. There are three distinct landforms to be found: basalt plateau highlands, basalt plateau canyon country, and fringing desert piedmont.

The basalt plateau highlands include Poodle Mountain, the volcanic vent from which the Buffalo Hills basalt issued. This area is only moderately eroded compared to the canyon country around them. The basalt plateau canyon country has numerous deeply-cut canyons and gorges. This section of the WSA includes finger-like, flat-topped ridges and remnant plateaus between the canyons.

The fringing desert piedmont is low-relief alluvium with low parallel ridges and drainages lying perpendicular to the basalt plateau.

There are a number of range improvements present. They include 14 developed springs, 23 reservoirs, six fences for a total of 27.15 miles, a pipeline 0.5 mile long, one water trough, two corrals and one study plot. There are 63 ways totaling 76.9 miles. Five stream channels along the southern boundary road were contoured to reduce the impacts of floods. The contouring extends up to 0.25 mile within the WSAs. This road also has three borrow pits just outside the study area boundary.

Abandoned and active ranches are near the WSA boundaries and are visible from portions of the unit. A highway and a major county road, usually sustaining light traffic, are the east and southeast boundaries.

B. Solitude: Opportunities for solitude are considered outstanding. The basalt plateau highlands offer fair to good local vegetative screening from scattered stands of juniper and fair topographic screening because of the rolling landform. The basalt plateau canyons also offer fair to good vegetative screening due to the juniper, but the deep canyons, many of them meandering, offer excellent topographic screening. In the fringing desert piedmont, the low shrubs provide poor vegetative screening and the low relief provides fair to poor topographic screening.

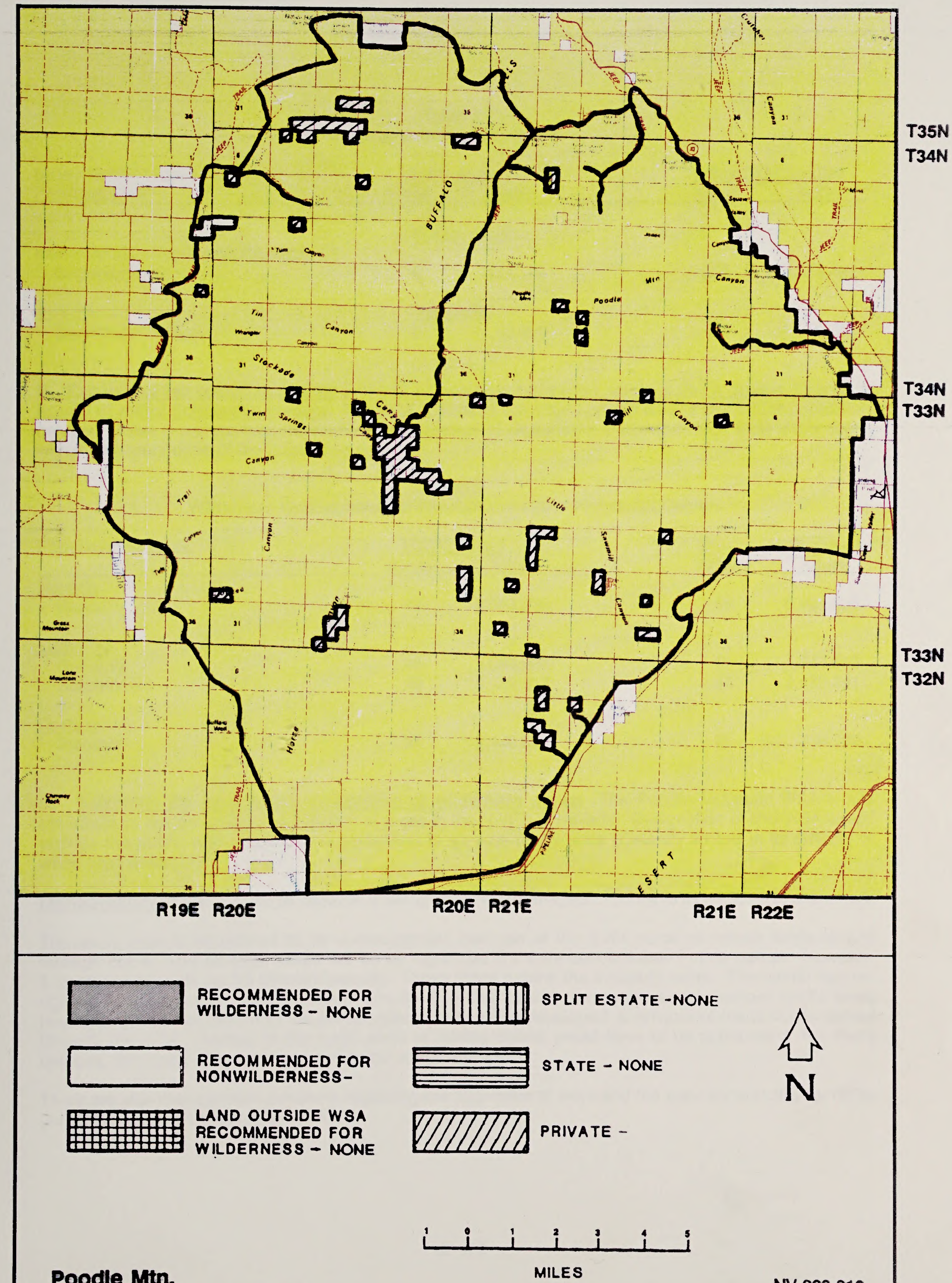
The WSA is the proper size and shape to provide outstanding solitude, even though the road from the north boundary to the center of the unit detracts from the solitude. Two military training routes over the WSA have flights at 500 feet and below.

C. Primitive and Unconfined Recreation: The WSA's size and topography create outstanding opportunities for primitive and unconfined recreation such as day-hiking, camping, backpacking, horse-packing, rock climbing and scrambling and nature study. Attractions that might bring people to this area include Nobles wagon route (a California emigrant trail used during the mid-1800s), the Poodle Mountain volcanic center and many impressive canyons. Mountain lions, antelope, deer and sage grouse offer opportunities for hunters. The WSA is also part of the Buffalo Hills Herd Use Area for wild horses.

D. Special Features: There are no special features in the WSA.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 142,050 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. Table 2 summarizes the ecosystem information.



Poodle Mtn. Proposal

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Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
NATION WIDE				
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,461
NEVADA				
Sagebrush Steppe	2	86,907	34	1,252,990

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers:** The WSA is within a five hour's driving time of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of the population center.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Oregon				
Medford	31	2,440,081	21	730,038

C. **Balancing the geographic distribution of wilderness areas:** The Poodle Mountain WSA would contribute to the geographic distribution of areas in the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is considered to be unmanageable because of the 3,706 acres of private lands spread through out it. This acreage would not be as significant if it were concentrated in one parcel. However, it is spread through out 38 different parcels. These areas control the available water. The owner has the right to develop any of these parcels at any time he desires and reasonable access across public lands has to be granted to him. If all the private parcels were to be developed, a network of roads would spread through the WSA. Access to the 1,400 acres of mining claims would have to be guaranteed. For these reasons, this study area is considered to be unmanageable.

There are also management concerns regarding the 76.9 miles of ways and the easy accessibility for ORVs (44,000 acres or 31 percent of WSA).

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies ass well as local prospectors, (5) minor field verification by BLM geologists and (6) present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 28,300 acres with moderate metallic mineral potential (mercury*, uranium, tungsten* and silver); 20,000 acres with high nonmetallic mineral potential (sand and gravel); 122,000 acres with moderate nonmetallic mineral potential (decorative stone, red cinder aggregate) and 24,000 acres with moderate geothermal potential.

There are approximately 1,400 acres of mining claims in the WSA. There is no present production of any mineral or geothermal resources in the study area.

In summary, quantities of various mineral and energy resources are unknown, but the potential for occurrence is from moderate to high in portions of the WSA.

Impacts on Resources

The comparative impact table (Table 4) below summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on Wilderness Values	None of the 142,050 acres would receive long-term protection. Naturalness would be impaired on approximately 6% or 8,065 acres as a result of increased ORV use and surface disturbance from energy and mineral activity. Solitude would be adversely impacted on approximately 1,105 acres or less than 1% from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA.	Wilderness area - values would be preserved on 87,900 acres. There are no special features in this area. Nonwilderness area - Naturalness would be impaired on approximately 2% or 1,015 acres as a result of increased ORV use and energy and mineral activity. Solitude would be adversely impacted on approximately 255 acres or less than 1%, from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal exploration and development of 2 small gravel pits, 1 small cinder pit and decorative stone sales would occur.	Projected base-precious metal exploration and development of 2 small gravel pits, 1 small cinder pit and decorative stone sales would be foregone.	Projected base-precious metal exploration and development of 2 small gravel pits would be foregone in the portion recommended for wilderness. The development of 1 small cinder pit and decorative stone sales would be possible in the area not recommended for wilderness.
Impacts on the Level of Exploration for Geothermal Resources	Geothermal exploration could occur.	Projected geothermal exploration opportunities would be foregone.	Geothermal exploration would be foregone in the area recommended for wilderness. Projected geothermal exploration would be possible in the area not recommended for wilderness.
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the current 750 visitor hours to 1,700 hours annually.	750 visitor hours of current ORV use and 1,700 hours of foreseeable future use would be displaced annually. This use would be absorbed on adjacent lands.	50 visitor hours of current ORV use and 110 hours of foreseeable future use would be displaced annually from the area recommended for wilderness. This use would be absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 700 visitor hours to 1,550 hours annually.

Local Social and Economic Considerations

Social and economic considerations were decided not to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the sixteen comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting WSA status included opportunities for solitude, primitive and unconfined recreation and naturalness. Reasons given for opposing WSA status included other resource values, roads, intrusions and lack of opportunities for solitude or recreation. These comments addressed the entire 162,560 acres of the original study area. About 20,000 acres have since been removed from wilderness consideration.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public hearings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Only one oral comment was received that named this WSA and that person agreed with the Proposed Action in the draft EIS (No Wilderness). Of the 74 written comments, 64 of them supported more wilderness than the Proposed Action and 10 of them supported the Proposed Action. Comments discussed roads and other human imprints and the private property inside the WSA as well as the need for hunter access into the area and the lack of solitude. Other people wrote about the need to preserve the wildlife, the traces of the 19th century Nobles Trail, the desirability of the scenery and wild horse viewing opportunities. The WSA's proximity to Reno was also discussed.

No comments about wilderness were received from Washoe County agencies or officials.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We agree with the BLM that this area lacks significant wilderness characteristics to outweigh the resource conflicts, especially due to private land inholdings and a number of roads and ways extending into the area. We urge that this area be dropped from further consideration." This letter was written in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions are placed on military flights. It has said that it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

FOX RANGE WILDERNESS STUDY AREA

1. THE STUDY AREA - 75,404 acres

The Fox Range WSA (NV-020-014) is located in central Washoe County, approximately 10 miles south of Gerlach, Nevada. Reno, Nevada is within 2 hours driving time of the study area and Sacramento, California is 4 hours driving time away. The WSA includes 75,404 acres of public land and surrounds 400 acres of private land (Table 1).

The WSA boundary consists of 44.5 miles of roads, the Western Pacific Railroad for 5.8 miles, private land for 7.2 miles, Pyramid Lake Indian Reservation for 5.8 miles and topographic features for 0.6 mile. The railroad forms the north boundary, leading into the West San Emidio Desert Road. The boundary proceeds south along this road, intermixed with various parcels of private land. When the road meets the boundary of the Pyramid Lake Indian Reservation, the WSA border turns northwest, following the edge of the reservation and then west until it meets the Pah Rum Peak Road. The boundary proceeds north until it meets the Pah Rum Peak Ridge; it follows this until it meets the Wild Horse Canyon Road. The boundary follows this road to the west, jockeying around some private land, until it meets the East Smoke Creek Desert Road. The boundary then follows this road north, again maneuvering around some private land, and continues north. This west boundary is a combination of road and railroad.

The Fox Mountain WSA is approximately 20 miles long in a north-south direction and 2 to 9 miles across in an east-west direction. It straddles the north end of the Fox Mountain Range, a typical range of the Basin and Range Geomorphic Province. Elevations range from 3,900 feet to 7,608 feet. The Smoke Creek Desert lies to the west and the San Emidio Desert to the east. Both of these deserts are represented on the fringe of the WSA.

There are three distinct landforms: the highly dissected rugged terrain of steep canyons and prominent ridges to the west, the smoother rolling hills and the desert piedmont located on both the east and west fringes of the WSA. There is some riparian vegetation as well as barren ridges and sand dunes.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September,1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 23,600 acres would be designated as wilderness and 51,804 acres would be released for uses other than wilderness, and a no wilderness alternative which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 75,404 acres recommended for nonwilderness

The recommendation for this WSA is to release all 75,404 acres for uses other than wilderness (Maps 1 & 2). All Wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation for this WSA would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The Fox Range WSA is recommended for uses other than wilderness because of moderate to high potential for metallic mineral and geothermal resources and manageability concerns with 400 acres of private inholdings.

In this WSA, the mineral potential outweighs the wilderness resources. Nine thousand eight hundred acres have high metallic mineral potential and 25,600 acres have moderate metallic mineral potential. The minerals involved are antimony, lead, zinc, copper, nickel, mercury, molybdenum, gold and silver. There are 14,000 acres with high geothermal potential and 11,800 acres with moderate potential. There would also be manageability problems associated with the 2,767 acres (3% of WSA) of oil and gas leases and the 2,100 acres of preFLPMA mining claims. The claim holders and the possessors of the leases would have the right to develop their prospects.

It is projected that a 320 acre (100 acres in WSA) open pit precious metal mine is likely to be developed as well as two 10-acre underground precious metals mines. There would be 3 1/2 miles of access roads, waste dumps and staging areas associated with the mines. Development of these operations would severely reduce the wilderness characteristics of the study area. The noise caused by engines, dust, buildings, vehicles and diggings would lessen the wilderness experience.

Potential development of the 400 acres of private lands would affect an area greater than the actual disturbance. Development of these lands would greatly diminish the values of naturalness and solitude in other parts of the study area. Also, since the BLM is required to provide reasonable access to inholding owners, construction of access roads through the area would create an additional erosion of wilderness values.

In summary, the mineral potential, combined with the manageability difficulties, outweigh the wilderness values in this WSA.

Table 1
Land Status and Acreage Summary of the Study Area

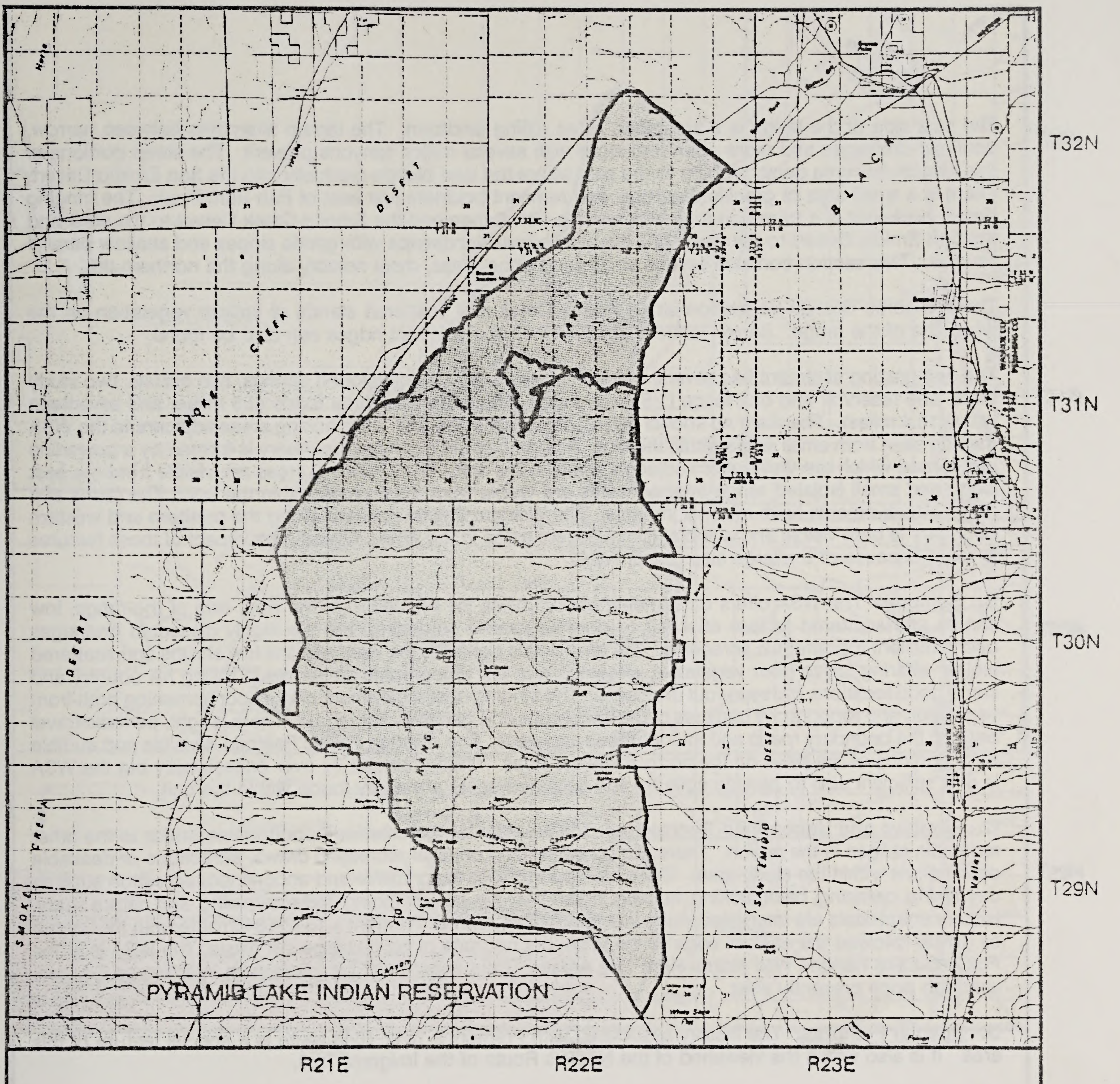
Within Wilderness Study Area	
BLM (surface and subsurface)	75,404
Split Estate (BLM surface only)	0
Inholdings (State, Private)	400
Total	75,804
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended for Wilderness	0
Inholdings (State,Private)	0
Within the Area Not Recommended For Wilderness	
BLM	75,404
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	75,404
Inholdings (State, Private)	400

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. **Naturalness:** The WSA is predominantly natural. There are three distinct landforms: the west and east sides of the Fox Range and the fringing desert piedmont.

The west side of the Fox Range is a highly dissected, rugged landform of steep canyons and prominent ridges. There is an abrupt transition from the desert piedmont on the west to the range itself. A large bowl-like basin, Juniper Flat, is located near the ridge crest.



☐ RECOMMENDED FOR WILDERNESS - NONE

▨ RECOMMENDED FOR NONWILDERNESS

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE

▥ SPLIT ESTATE - NONE

▤ STATE - NONE

▧ PRIVATE - NONE

N

MILES

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The east side of the range is a smoother, more rolling landform, The terrain alternates between narrow, confined drainages and more open drainages with several major canyons present. The steep portions of this section become gently sloping to the east where the land blends gradually into the San Emidio Desert. There is a small area of granitic outcrops and remnant boulders just east of Pah Rum Peak. The fringing desert piedmont is a transition area between the Fox Range and the Smoke Creek Desert to the west and the San Emidio Desert to the east. It is a typical alluvial landscape with gentle slopes and shallow parallel washes. This section contains several small sand dune areas, most notably along the northern tip.

There is some riparian vegetation along Rodeo Creek and scattered stands of juniper vegetation on the west side of the range. Barren lands associated with the adjacent ridges can also be found.

The one grazing allotment has several range improvements - six developed springs, two corrals, two study plots, one reservoir and one fence (1.5 miles long). There are also three roads (8.5 miles) and seventeen ways (18.4 miles). There are no known mining areas within the unit. Two mining areas adjacent to the WSA may be seen from small areas within the unit. A portion of the northeast boundary is formed by a powerline and a road which are visible from adjacent areas in the unit. Small farming areas are visible from the east slope and small isolated range improvements are visible from most areas within the unit. The farms and range improvements have minimal impacts. The Western Pacific Railroad along the northern and western boundary is both visible and audible from adjacent areas in the WSA. Overall, the impact of these features is slight because of the large size of this WSA.

B. Solitude: The WSA offers outstanding opportunities for solitude. On the west side of the range, low shrubs and scattered juniper offer fair to poor vegetative screening, but the highly dissected drainages offer excellent topographic screening. The east side is similar to the west with the low shrubs and scattered juniper offering fair to poor vegetative screening with fair topographic screening in rolling hill country and some good locations in deeper cut drainages. The fringing desert piedmont offers poor screening both from vegetation and topography because of the low shrubs and generally flat terrain. There is light, periodic travel both on the boundary roads and interior roads and ways. The Western Pacific Railroad is visible and audible from portions of the WSA on the north and west sides. Military aircraft fly over occasionally but the WSA is of a sufficient size to provide solitude and secluded spots are easily found within the unit.

C. Primitive and Unconfined Recreation: The area contains recreation opportunities similar to the other mountain ranges in the region. There are no particularly unusual recreation draws, attractions or desirable destinations within the study area. There are opportunities for primitive and unconfined recreation such as day-hiking, camping, backpacking, hunting, horse-packing, rock climbing and scrambling, and nature study. History enthusiasts are interested in the fact that part of John C. Fremont's 1842-1843 route, with Kit Carson as guide, followed the eastern edge of the WSA, but no trace of his passage still exists. The WSA is in the Fox and Lake Ranges Wild Horse Herd Use Areas. There is potential for a fishery in Wild Horse Canyon, although none presently exist.

D. Special Features: The history associated with Fremont's 1842-1843 route is a special feature of this area. It is also within the viewshed of the Noble's Route of the Imigrant Trail.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 75,404 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. Table 2 summarizes the ecosystem information.

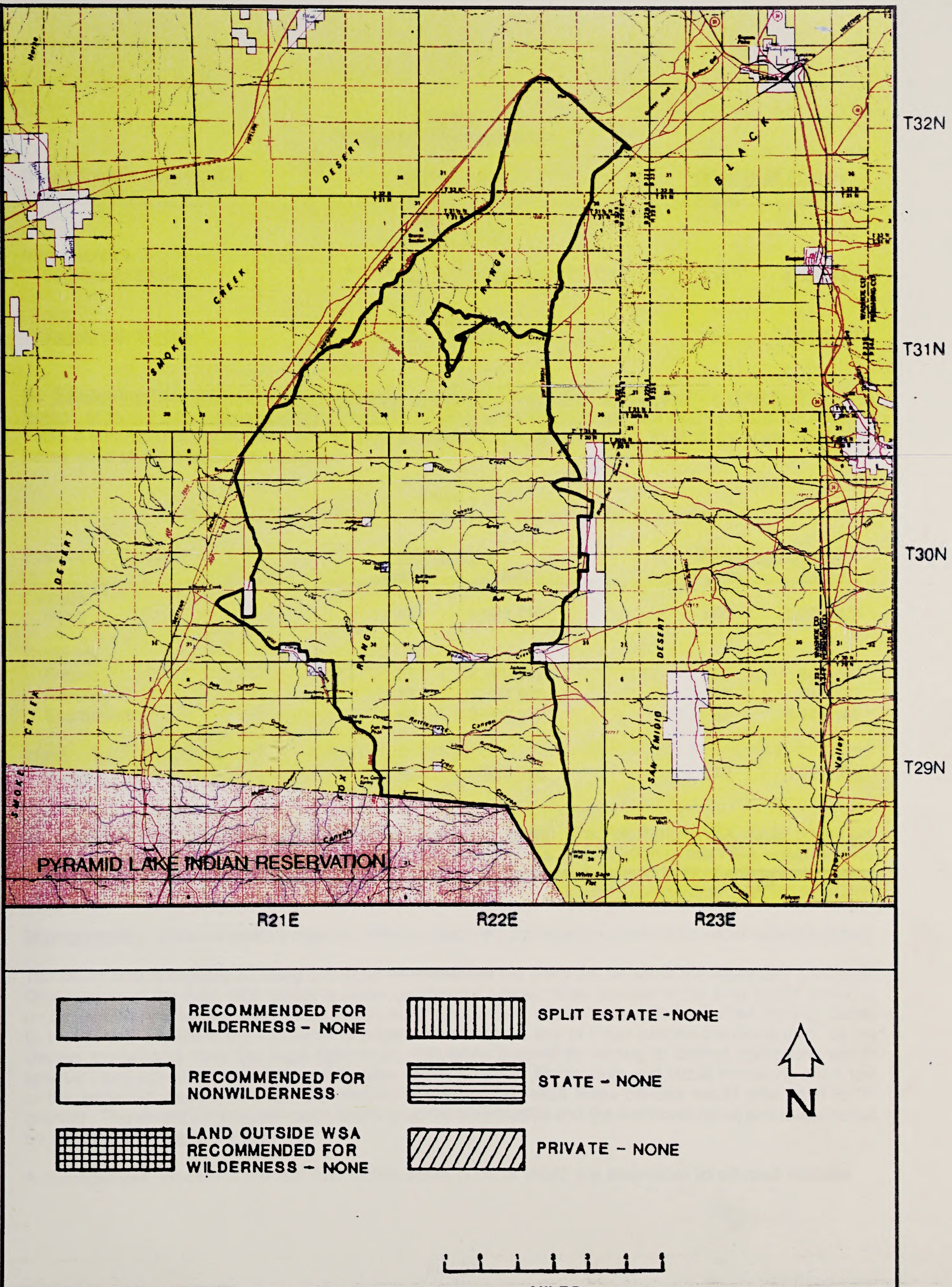
T32N
T31N
T30N
T29N
R21E
R22E
R23E
SMOKE CREEK DESERT
FOX RANGE
BLACK
SAN EMIDIO DESERT
PYRAMID LAKE INDIAN RESERVATION
RECOMMENDED FOR WILDERNESS - NONE
RECOMMENDED FOR NONWILDERNESS
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE
SPLIT ESTATE - NONE
STATE - NONE
PRIVATE - NONE
N
MILES

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Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Sagebrush Steppe	4	131,199	136	4,356,461
	NEVADA			
Sagebrush Steppe	2	86,907	34	1,252,990

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers:** The WSA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of the population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Fresno	37	4,101,852	28	460,790
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039

C. **Balancing the geographic distribution of wilderness areas:** The Fox Range WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is capable of being managed as wilderness but there will be some manageability concerns. One percent of the WSA (867 acres) is under geothermal leases; three percent of the area (2,267 acres) is under oil and gas leases; there is an additional three percent of the WSA with preFLPMA mining claims (2,100 acres); and there are 400 acres of private inholdings. If any of these parcels are developed, as the owners/possessors have the legal right to do, intrusions created by mining or drilling operations would seriously and adversely impact the wilderness values present. Noise, dust and visual intrusions are a few of the impacts. Access to allow the owners/possessors to reach these parcels would also have to be granted. This would involve new roads scarring up the countryside and the additional noise and dust caused by vehicles working in the area.

A management concern is the fact that 13,000 acres (17% of WSA) are accessible to off-road vehicles.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Minerals Stockpiling Act of 1946, with changes in subsequent Acts): 9,800 acres rated high for metallic mineral potential (antimony*, lead*, zinc*, copper*, nickel*, mercury*, molybdenum, gold and silver), 25,600 acres rated moderate for metallic mineral potential (same as above with the exception of lead), 14,000 acres rated high for geothermal potential and 11,800 acres with moderate geothermal potential. Portions of the Cottonwood Mining District and the Wild Horse Mine occur in cherrystem areas in the heart of the WSA. The mines in these areas have been past producers of gold, silver, copper, lead, zinc and antimony. This WSA has been nominated as an "Area of Critical Mineral Potential" by Exxon Minerals Company.

There are 2,100 acres of mining claims, 867 acres of geothermal leases and 2,267 acres of oil and gas leases in the WSA. There is no present production of any mineral or geothermal resource in the study area.

It is projected that a 320 acre (100 acres in WSA) open pit precious metal mine is likely to be developed as well as two 10 acre underground precious metals mines if the area were not to be designated as wilderness. There would be 3 1/2 miles of access roads, waste dumps and staging areas associated with the mines.

In summary, quantities of various mineral or geothermal resources are unknown, but the potential for occurrence is from moderate to high in several portions of the WSA.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 16 comments addressed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting WSA status were naturalness and opportunities for solitude and recreation. Reasons given for opposing wilderness study area status included other resource values, roads and intrusions.

These comments addressed the entire 100,000 acres which became the Fox Range and the Pole Creek WSAs. About 12,000 acres of the original study area have since been released from wilderness consideration.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on Wilderness Values	None of the 75,404 acres would receive long-term protection. Naturalness would be impaired on approximately 19% or 14,140 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on approximately 4% or 3,400 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation. None of the special features - Pah Rum Peak, Cottonwood Canyon or Noble's Route Immigrant Trail Viewshed - would receive long-term protection from ORV use or energy and mineral activity.	The values of naturalness, solitude and primitive recreation would be preserved throughout this WSA except on 100 acres of predesignation mineral claims with valid discoveries in Cottonwood Creek and Wild Horse Canyon zones. The special features would receive long-term protection except in Cottonwood Creek where valid discoveries and mining activities would impair the values.	Recommended Wilderness: Wilderness values would be preserved on 25,600 acres. The special feature of Pah Rum Peak would receive long-term protection. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 10% or 3,230 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Solitude would be adversely affected on approximately 6% or 3,230 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation. The special features of Cottonwood Canyon and Noble's Route Immigration Trail Viewshed would receive long-term protection.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Base-precious metal exploration, development of 1 large open pit and 2 small underground precious metal mines would be possible.	Projected base-precious metal exploration opportunities would be foregone. The projected development of 1 large open pit and 2 small underground precious metal mines would be allowed due to valid discoveries on pre-designation claims.	Base-precious metal exploration opportunities would be foregone in the portion recommended for wilderness. Projected base-precious metal exploration, development of one large open pit and 2 small underground precious metal mines would be possible in the portion not recommended for wilderness.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on the Level of Exploration for and Development of Geothermal Resources	Geothermal exploration and development of 2 small geothermal powerplants would be possible.	Geothermal exploration and development of 2 small geothermal powerplants would be foregone.	Geothermal exploration would be foregone in the area recommended for wilderness. Projected geothermal exploration and development of 2 small geothermal powerplants would be allowed in the area not recommended for wilderness.
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the present 80 visitor hours to 175 hours annually.	Eighty visitor hours of current ORV use and 175 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.	Twenty visitor hours of current ORV use and 45 hours of foreseeable future use would be displaced annually in the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the present 60 visitor hours to 140 hours annually.
Impacts on Range Condition	The proposed vegetative manipulation project would result in an improvement of range conditions on 940 acres.	The proposed vegetative manipulation project would not be permitted under wilderness designation.	The proposed vegetative manipulation project would result in an improvement of range conditions on 940 acres.

WSA-Specific Comments Continued

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3, and Reno on November 8, 1983). During this period, 72 comments were received; six of them were oral and 66 were written. All of the oral comments supported more wilderness than what was recommended in the draft EIS (no wilderness). Of the 66 written comments, 56 of them recommended more wilderness than that recommended in the draft EIS and 10 agreed with the proposed action (no wilderness). The subject of comments were the intrusions, such as fences, roads and private property, as well as the area's low wilderness quality. Other people said that the canyons were impressive and that the WSA's closeness to Reno should be considered.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We concur that this area should not be considered further for wilderness status. There is extensive mineral potential in the Fox Range and wilderness characteristics are generally limited..." This letter was written in response to the Draft Wilderness Environmental Impact Statement. No comments about wilderness were received from Washoe County agencies or officials.

The U.S. Air Force supports wilderness designation provided no restrictions are placed on military flights. It has promised to work with the BLM if military flights create problems in some areas.

No comments have been received on the Final Environmental Impact Statement.

POLE CREEK WILDERNESS STUDY AREA

1. THE STUDY AREA - 12,969 acres

The Pole Creek WSA (NV-020-014A) is located in central Washoe County, about 20 miles southwest of Gerlach, Nevada. It is a 3 hour drive from Reno. The WSA includes 12,969 acres of public land and no private or state lands (Table 1).

The area is bordered on the south by the Pyramid Lake Indian Reservation, on the west and northwest by roads adjacent to the Western Pacific Railroad, on the north and northeast by the Wild Horse Canyon Road intermixed with private land. The boundary follows this road until it reaches Pah Rum Peak Ridge, The boundary follows the ridge which turns to the south until it hits the Pah Rum Peak Road. The perimeter of the WSA follows this road until it returns to the Pyramid Lake Indian Reservation. The WSA is roughly triangular in shape with 5 or 6 miles on a side.

The WSA lies along part of the west face of the Fox Range, a typical mountain range of the Basin and Range Geomorphic Province. The Smoke Creek Desert lies to the west. There are two distinct landforms within the study area: part of the Fox Range and the fringing desert piedmont. The Fox Range is a highly dissected, rugged landform of steep canyons and prominent ridges. Along the east edge and adjacent to the main ridge line, the terrain is markedly smoother and less dissected. There are several prominent canyons in this section, running both north-south and east-west.

The fringing desert piedmont is the transition zone between the Smoke Creek Desert to the west and the Fox Mountain Range. It is an alluvial landscape with gentle slopes and shallow parallel washes and small wave-cut terraced hills to the south. The elevation of the WSA ranges from 3,870 feet near the railroad to 7,608 at the summit of Pah Rum Peak

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 10,900 acres would be designated as wilderness and 2,069 acres would be released for uses other than wilderness and a no wilderness alternative, which is the recommendation of this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 12,969 acres recommended for nonwilderness

The recommendation for this WSA is to release all 12,969 acres for uses other than wilderness (Maps 1 & 2). All Wilderness is the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. Although the recommendation is not the All Wilderness alternative, the recommendation for this WSA would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The Pole Creek WSA is recommended for uses other than wilderness because the high and moderate mineral potentials identified justify management emphasis on continued access for mineral exploration and development rather than management as a wilderness area. Three thousand and four hundred acres (26% of WSA) are rated as having high potential for metallic minerals and 9,569 acres (the remainder of the WSA) are rated as having moderate mineral potential. The minerals involved are lead, copper, zinc, gold, silver, tungsten, mercury, molybdenum and nickel. Also, 3,700 acres have moderate geothermal potential. There are 100 acres of pre-FLPMA mining claims in the WSA.

Based on current and past activities in the area, short-term interest in the Pole Creek WSA is likely. This interest would result in precious metal exploration consisting of cross-country travel, small drill sites and 1/2 mile of access roads disturbing a total of five acres. There are no existing geothermal leases, however, the exploration activities would continue with or without additional leasing activities. Oil and gas potential has been identified as being low, so no exploration is projected for them.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	12,969
Split Estate (BLM surface only)	0
Inholdings (State, Private)	0
Total	12,969
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Within the Area Not Recommended For Wilderness	
BLM	12,969
Split Estate	0
Total BLM Not Recommended For Wilderness	12,969
Inholdings (State, Private)	0

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

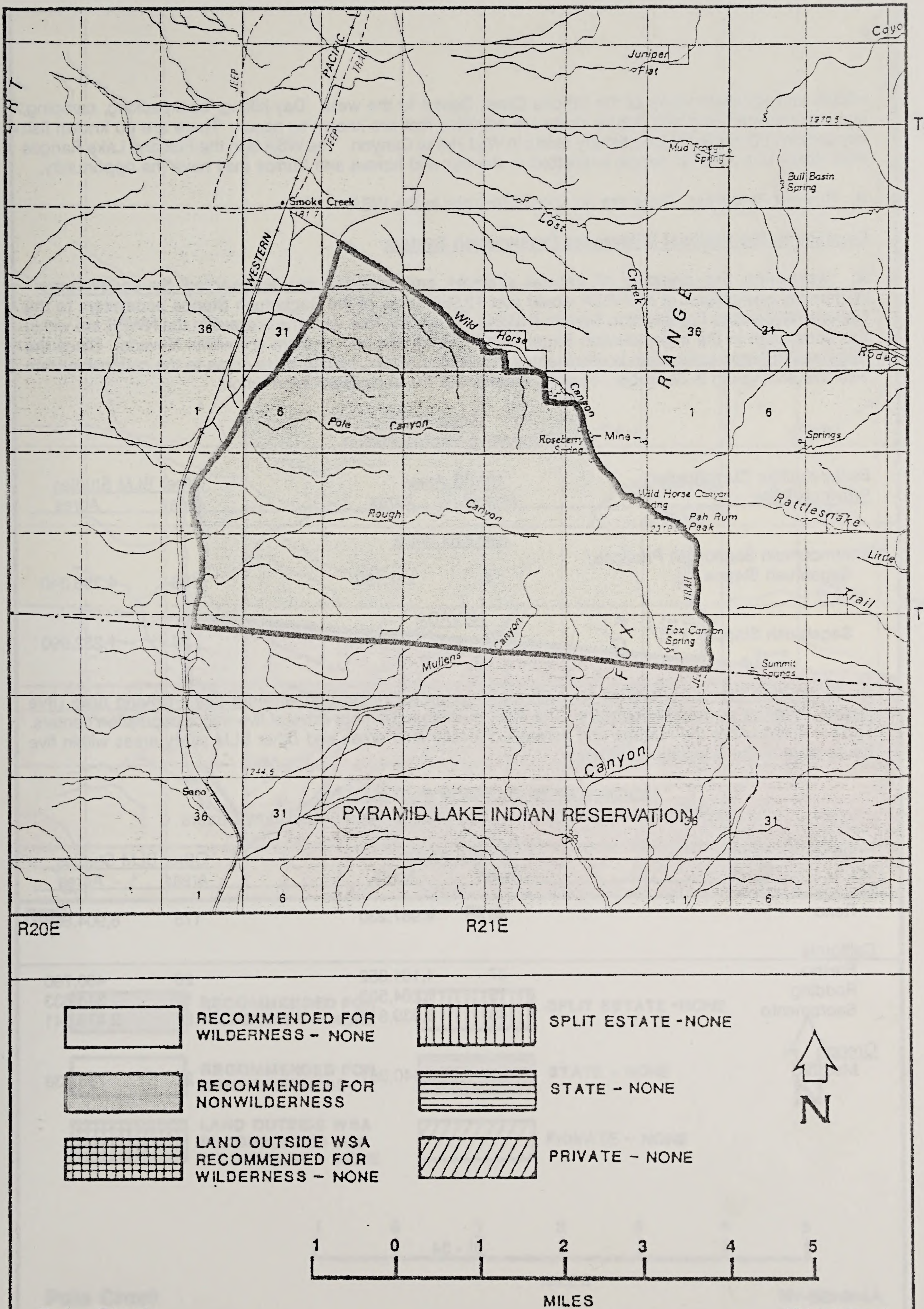
A. Naturalness: The WSA is predominantly natural. There are two distinct landforms within the study area: part of the Fox Range and the fringing desert piedmont. The Fox Range is a highly dissected, rugged landform of steep canyons and prominent ridges. Along the east edge and adjacent to the main ridge line, the terrain is markedly smoother and less dissected. There are several prominent canyons in this section, running both north-south and east-west. The fringing desert piedmont is the transition zone between the Smoke Creek Desert to the west and the Fox Mountain Range. It is an alluvial landscape with gentle slopes and shallow parallel washes and small wave-cut terraced hills to the south.

Range improvements in the two grazing allotments consist of two developed springs, seven miles of fence and two vehicle ways totalling 2.4 miles. The Western Pacific Railroad runs along the western boundary and is visible and audible from adjacent areas in the WSA. The main mining area in Wild Horse Canyon is visible from small portions inside the unit.

B. Solitude: In the Fox Range section of the WSA, low shrubs and scattered juniper offer fair to poor vegetative screening while highly dissected drainages offer excellent topographic screening. Low shrubs provide minimal vegetative screening in the fringing desert piedmont section. Also, topographic screening is generally poor except on the wave-cut terraced hills on the south end where it is fair.

With the exception of the area within Wild Horse Canyon which has mining activity in it, the WSA is of a size and shape that would provide solitude. The low military flights and the railroad are also major external impacts on solitude. Periodic, light traffic along the boundary roads is visible from immediately adjacent areas within the unit but does not create a significant impact.

C. Primitive and Unconfined Recreation: The WSA has outstanding opportunities for primitive and unconfined recreation. There is easy accessibility both to the unit and within it. There is a variety of



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wildlife and excellent views of the Smoke Creek Desert to the west. Day-hiking, backpacking, camping, hunting, rock-climbing and nature study are activities that are known to occur. There are no known fish populations but potential for a fishery exists in Wild Horse Canyon. The WSA is in the Fox and Lake Ranges Wild Horse Use Area so people interested in viewing wild horses and burros may have the opportunity.

D. Special Features: There are no special features in the WSA.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 12,969 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. Table 2 summarizes the ecosystem information.

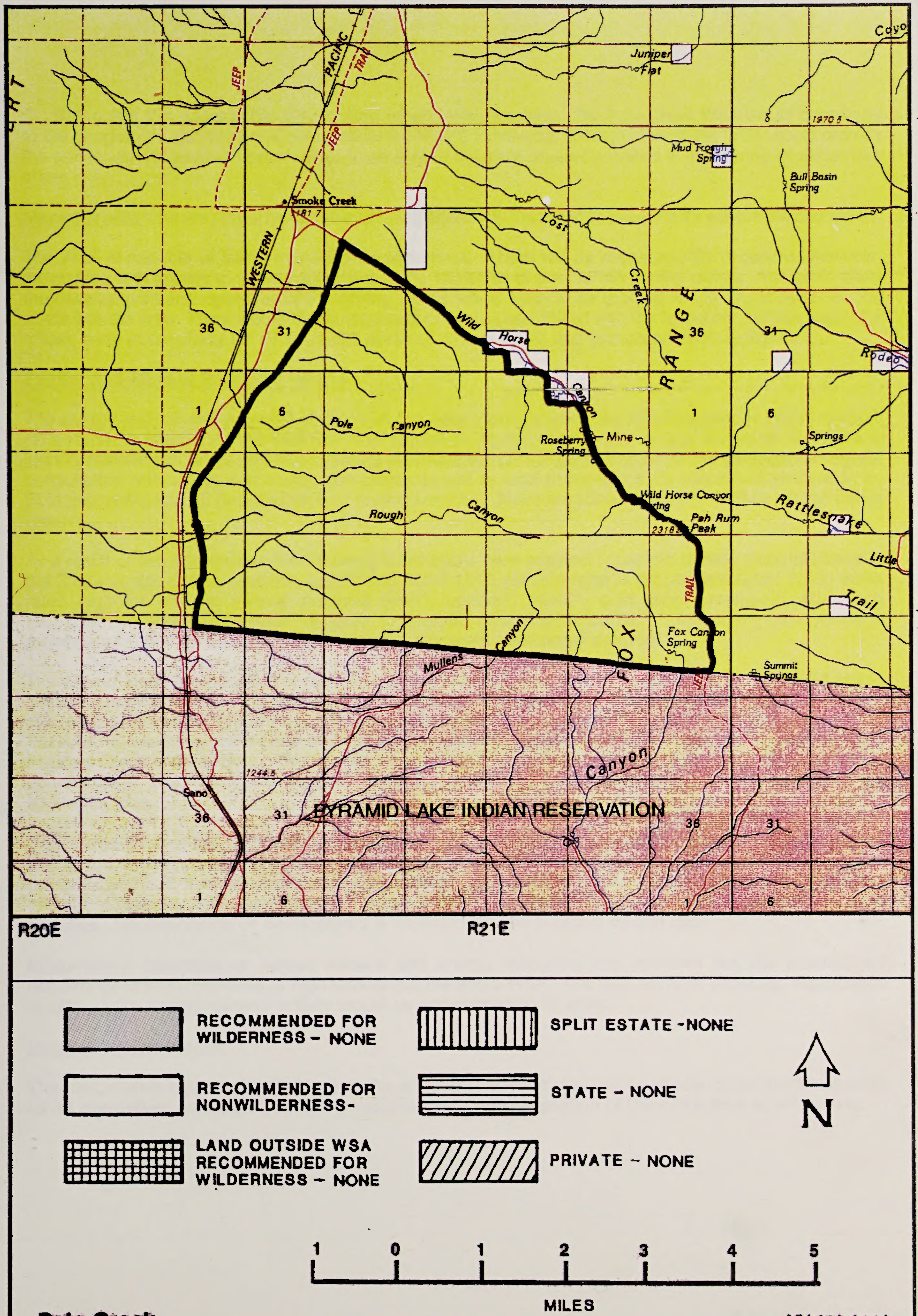
Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	2	86,907	34	1,252,990

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of the population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Fresno	37	4,101,852	28	460,790
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Oregon				
Medford	31	2,440,081	21	730,038



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C. Balancing the geographic distribution of wilderness areas: The Pole Creek WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character):

The WSA is capable of being managed as wilderness. There will be manageability problems, however, associated with access to and development of the 100 acres of pre-FLPMA mining claims. Access to allow the development and operation of the mining claims would have to be granted which would result in new roads into the area. There would be management concerns associated with the following: vehicle ways (2.4 miles), easy accessibility for ORVs (3,000 acres or 23% of WSA) and occasional military flights.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities. There are 100 acres of pre-FLPMA mining claims present.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 3,400 acres rated high for metallic mineral potential (lead*, copper*, nickel*, gold, zinc*, mercury*, silver and molybdenum), 9,569 acres rated moderate for metallic mineral potential (lead*, tungsten*, mercury*, and molybdenum) and 3,700 acres rated as having moderate geothermal potential.

There is no present production of any mineral or geothermal resources in the study area. The Wild Horse Mine, located just outside the northern boundary of the WSA, has been a past producer of gold and silver. The WSA was nominated an "Area of Critical Mineral Concern" by Exxon Minerals Company.
Based on surrounding current and past metallic mineral exploration/development, short-term interest within the Pole Creek WSA is likely. This interest would result in precious metal exploration, consisting of cross-country travel, one mile of drill roads and pads, dozer trenches and open cuts disturbing five acres on the southwest side.

Geothermal interest has subsided compared to the past, however, proposed developments are increasing in the surrounding areas. This interest would result in exploration consisting of cross country travel, small drill sites and 1/2 mile of access roads disturbing 5 acres along the west side. There are no existing geothermal leases, however, these exploration activities would occur with or without additional leasing activities. No exploration or development is expected for low potential oil and gas.

In summary, quantities of various mineral and energy resources are unknown but the potential for occurrence is from moderate to high throughout the entire WSA. The total acres of projected disturbance resulting from energy/mineral activity would be approximately 10 acres.

Impacts on Resources

The comparative impact table (Table 4) on the adjoining page summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on Wilderness Values	None of the 12,696 acres would receive long-term protection. Naturalness would be impaired on approximately 15% or 2,010 acres as a result of increased ORV use and surface disturbance from energy and mineral activity. Solitude would be adversely impacted on approximately 1% or 170 acres from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. There are no special features, however, Rough and Pole Canyons do contain unique scenery which would not receive long-term protection, especially Rough Canyon which contains existing claims.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA. The unique scenery in Rough and Pole Canyons would receive long-term protection.	Area Recommended For Wilderness: Wilderness values would be preserved on 10,900 acres. Scenic Rough and Pole Canyons would receive long-term protection. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 19% or 385 acres as a result of increased ORV use and energy and mineral activity. Solitude would be adversely impacted in approximately 4% or 85 acres from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. There are no special features, however, scenic Rough and Pole Canyons would receive long-term protection.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal exploration and development would be possible.	Base-precious metal exploration and development would be foregone due to a withdrawal for wilderness purposes.	Base-precious metal exploration and development would be foregone in the area designated as wilderness. Projected base-precious metal exploration and development would be possible in the area not recommended for wilderness.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on the Level of Exploration for Geothermal Resources	Projected geothermal exploration would be possible.	Geothermal exploration would be foregone due to a withdrawal for wilderness purposes.	No energy exploration is expected in the portion recommended for wilderness. Projected geothermal exploration would be possible in the area not recommended for wilderness.
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the present 20 visitor hours to 45 hours annually.	20 visitor hours of current ORV use and 45 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.	ORV use would not change in the portion recommended for wilderness because there is no ORV accessible land. ORV use in the area not recommended for wilderness would grow from the current 20 visitor hours to 45 hours annually.

Local Social and Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980) many of the 16 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study status were the following: naturalness and opportunities for solitude and recreation. Reasons given for opposing wilderness study area status were the following: other resource values, roads and intrusions. These comments addressed the entire 100,000 acres which became the Fox Range (014) and Pole Creek (014A) WSAs. About 12,000 acres of the original study area have since been released from wilderness consideration.

During the 90-day comment period for the draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the 9 written comments received during this period, three of them supported more wilderness than the draft EIS (no wilderness) and six of them agreed with the draft EIS. Several comments discussed the need to preserve the naturalness, wildlife, scenery and recreation opportunities for future generations.

No comments about wilderness were received from Washoe County agencies or officials.

In a letter to the Winnemucca District, dated december 30, 1983, the Governor of the State of Nevada said, "We concur that this area should not be considered for wilderness status. There is extensive mineral potential in the Fox Range and wilderness characteristics are generally limited, except for a small section of the Pole Creek area that does not, by itself, merit wilderness status." The letter was in response to the Draft Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions are placed on military flights. It has said that it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

CALICO MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 67,647 acres

The Calico Mountains WSA (NV-020-019) is located in western Humboldt County and northwestern Pershing County of northwestern Nevada. It is about 30 miles northeast of Gerlach and about a 2 1/2 hour drive from Reno. The WSA includes 67,647 acres of BLM lands with no private or state inholdings. (Table 1).

The boundary begins at the southeast corner on the Soldier Meadow Road. The eastern boundary proceeds north, swing around an opal mine and a gravel pit until the Donnelly Creek Road. The boundary follows this road to the west side of the Calico Range, intermixed with private land and a fence that parallels the road. This road meets the Cain Spring Road and the boundary proceeds south, detouring to the east around mining prospects east of Donnelly Peak and returning to the west, regaining the Cain Spring Road. The boundary heads south along this road, jockeying around some private land, until it reaches the Sand Dune Road. It then proceeds west along this road, forming the southern boundary of the WSA, until it meets the Soldier Meadow Road, the starting point.

The unit straddles the southern end of the Calico Mountain Range, essentially a typical range of the Basin and Range Geomorphic Province. The WSA runs approximately 19 miles in a north-south direction and 7 miles in an east-west direction. The elevation ranges from 3,950 to 8,491 feet.

Four distinct landforms may be found: the high elevation crest around Donnelly and South Donnelly Peaks; the dendritic drainages east of Donnelly Peak (Division Peak); the dendritic drainages west of the ridge crest; and the fringing desert piedmont.

The high elevation ridge crest runs from the north boundary road south to South Donnelly Peak and includes Donnelly Peak. It is characterized by rolling ridges and shallow, moderately dissected drainages.

The drainages on the east side have parallel (east-west) drainages deeply cut into the underlying basalt and andesite flows. This section includes Mormon Dan and Petrified Canyons, both of which have steep cliffs and colorful ridges. Here, also, are large areas of landscape exhibiting variegated colors, the calico effect, and the headwaters of Donnelly Creek with its riparian habitat. The dendritic drainages on the west side have shallow, lightly dissected drainages. They blend gradually into the fringing desert piedmont. A small area of variegated color landscape may be seen in this section.

The fringing desert piedmonts, with widths ranging from one-half to two miles, form the border of the WSA on the east, south and west sides. They are nearly flat alluvium with low parallel ridges and sandy hummocks common in the south part. The piedmonts are not as well delineated on the west side as on the east side.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were three alternatives analyzed in the EIS: An all wilderness alternative, a partial wilderness alternative where 58,800 acres would be designated as wilderness and 8,847 acres would be released for uses other than wilderness and a no wilderness alternative which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 67,647 acres recommended for nonwilderness

The recommendation for this WSA is to release all 67,647 acres for uses other than wilderness (Maps 1 & 2). All Wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. Although the recommendation is not the All Wilderness alternative, the recommendation for this WSA would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The WSA has been recommended for uses other than wilderness because of mineral resource potential. The draft EIS proposed action differed from the final EIS recommendation. Fifty-eight thousand acres were preliminarily recommended for wilderness. New information regarding mineral potential was received, which, when analyzed, resulted in the current recommendation.

The entire WSA is rated as having potential for nonmetallic minerals (petrified wood) with 1,000 acres rated as being high and the remainder as being moderate. Six thousand, one hundred acres of the WSA are rated as having high metallic mineral potential (gold, silver, lead* and tungsten) and 9,500 acres rated as having moderate metallic mineral potential (gold, silver, antimony*, mercury* and uranium). Twenty-five thousand, nine hundred acres are rated as having high geothermal potential and 6,500 acres are rated as having moderate geothermal potential.

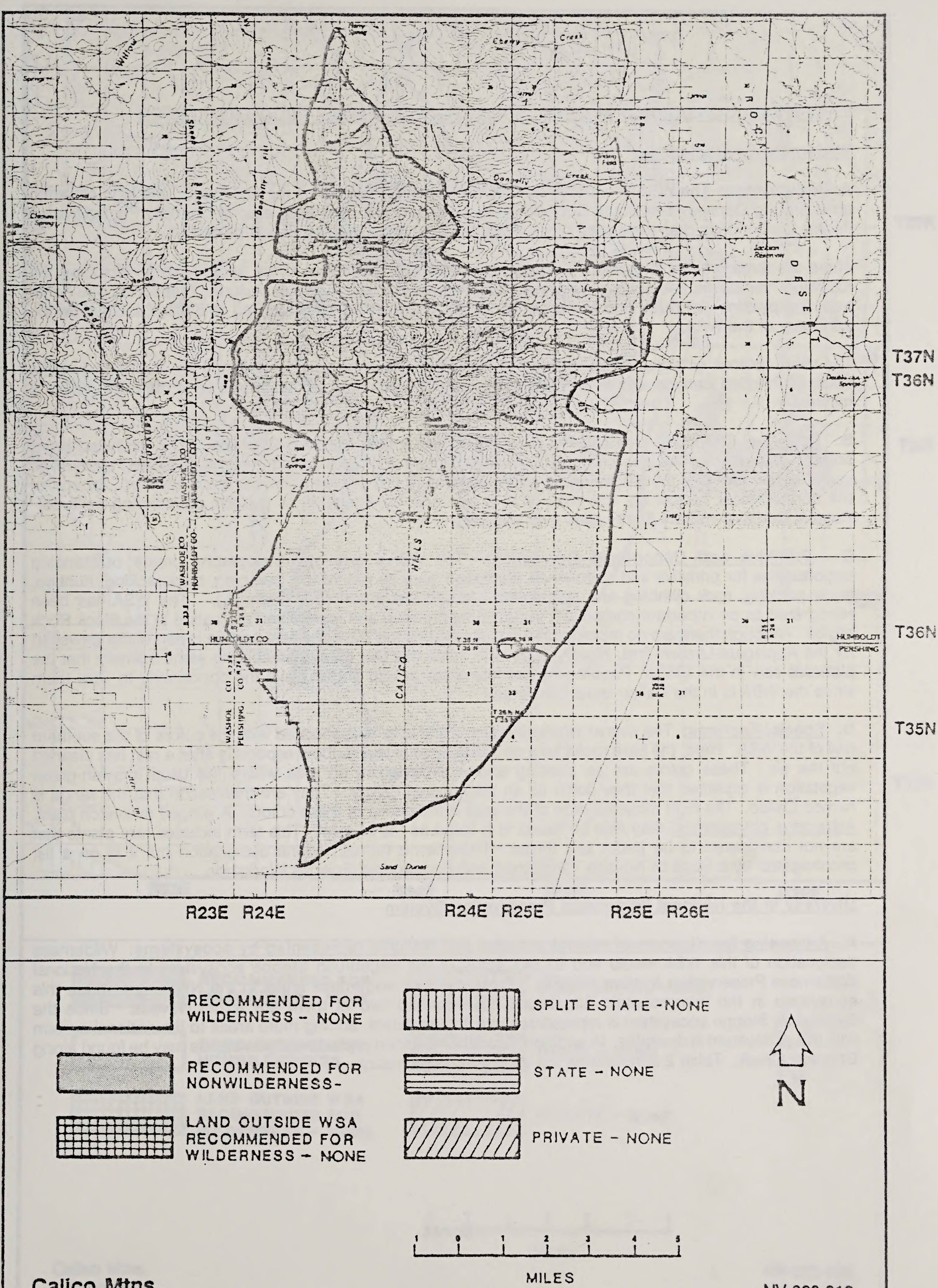
Short-term interest for metallic minerals is likely within the Calico Mountains WSA. This interest would result in the development of a 600 acre open pit mine in the southeast portion of the study area. Development of another underground mine, 1 1/2 miles of roads, cross country travel, drill pads, dozer trenches and open cuts would disturb an additional 45 acres.

Although geothermal exploration in the study area has been on the wane, proposed developments are increasing in the surrounding areas. This interest would result in the development of five small geothermal wellhead generators with associated well pads, access roads, pipelines and power lines and cross-country travel. Sixty acres of disturbance would occur.

There are also current oil and gas and geothermal leases, pre-FLPMA mining claims, several grazing developments, 18.5 miles of way, easy ORV accessibility for part of the WSA and occasional military flights.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	67,647
Split Estate (BLM surface only)	0
Inholdings (Private)	0
Total	67,647
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended for Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	67,647
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	67,647
Inholdings (State, Private)	0



Calico Mtns.
Proposal

NV-020-019
January 1990

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The WSA is primarily natural. Four distinct landforms may be found: the high elevation crest around Donnelly and South Donnelly Peaks; the dendritic drainages east of Donnelly Peak (Division Peak); the dendritic drainages west of the ridge crest; and the fringing desert piedmont.

There are three grazing allotments in the study area and a number of range improvements including the following: ten developed springs, two reservoirs, two water troughs, two exclosures, one corral, one horse trap, one pipeline (0.4 mile), and one fence (6 miles). There are 15 ways totalling 18.5 miles, located on the periphery of the WSA.

The most obvious activities on the outside of the unit that can be seen from inside are the mining works south of Petrified Canyon and west of Donnelly Peak. Some ranch works can be seen but their impact is minimal.

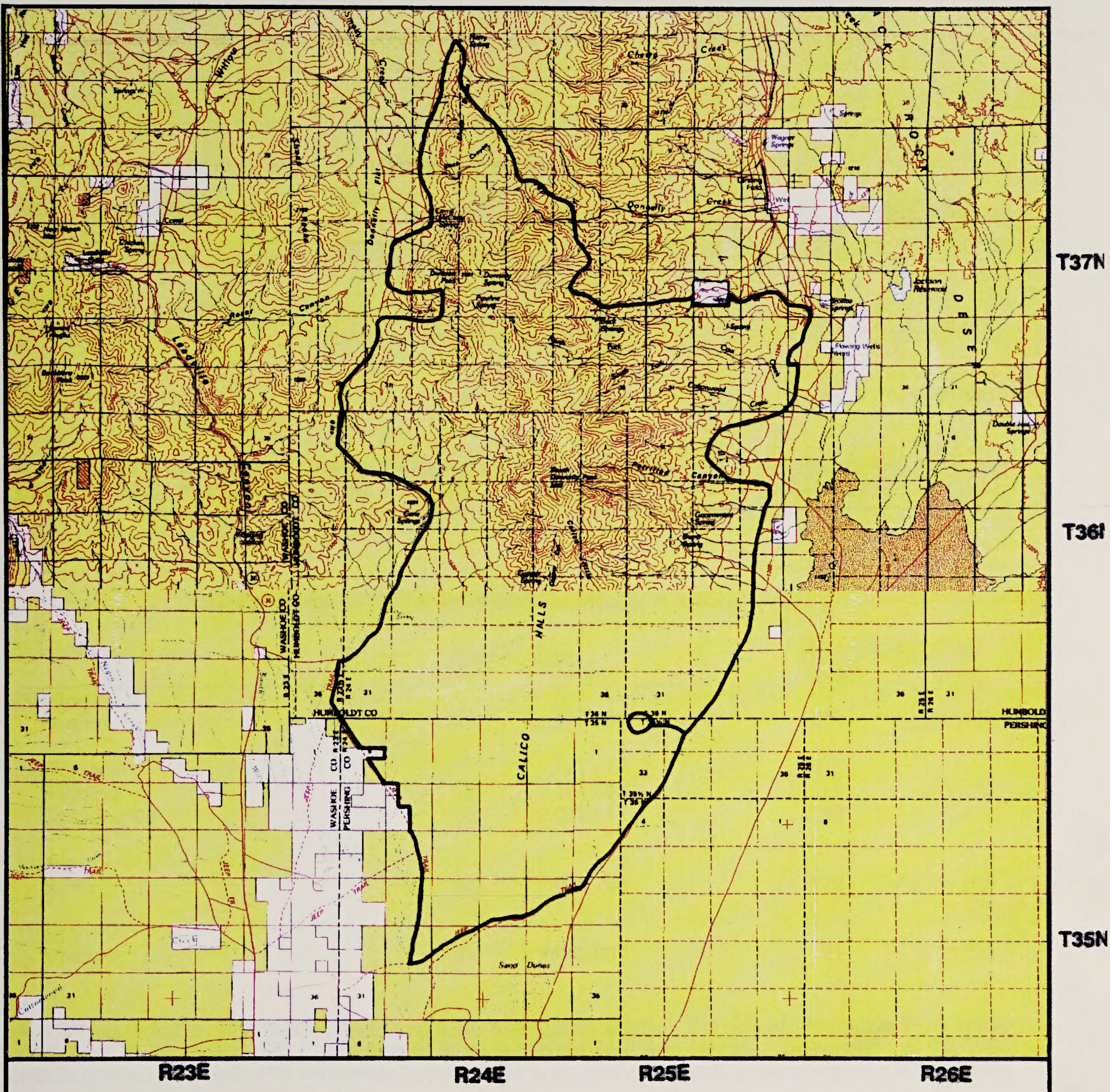
B. Solitude: The study area's varied topography and limited accessibility make for an easily achieved solitude experience. The steep rugged canyons and deep drainages provide unlimited isolated spots. The varied terrain provides the natural barriers needed to keep visitors separated from one another. Except for the northernmost narrow tip, the WSA is of a size and configuration to provide outstanding solitude. Regular low-level military flights pass over the area.

C. Primitive and Unconfined Recreation: The WSA's size and topography create outstanding opportunities for primitive and unconfined recreation such as day-hiking, camping, backpacking, hunting, horse-packing, rock climbing and scrambling , nature study and rock hounding. The WSA has been recognized as an important component in providing primitive and unconfined recreation in the Black Rock region. Although there are no recorded historic sites within the WSA, the east portion is part of the viewshed for the Applegate-Lassen Trail. History buffs who travel this trail today can see the same scenery that the pioneers saw in the 1850s. People who are interested in wild horses have the opportunity to view them since the WSA is in the Calico Herd Use Area.

D. Special Features: The overwhelming interest of the area is associated with the colors of the southern half of the WSA. Here, the bare rocks take on many hues of the rainbow especially after a rain has cleaned out the air. These colors are so startling and unexpected in an area where the usual grayish-green vegetation is expected that they come as an unexpected delight. They are the reason that the range is named Calico. The high mineralization of the area is the cause of these colors. A winged milkvetch plant, Astragalus petrocarpus, may also be found. It is listed as "other rare". This term includes rare plants that are not considered to be under any threat. There is no formal, federal designation but it is on a list promulgated by a State of Nevada Threatened and Endangered Species Workshop.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features represented by ecosystems: Wilderness designation of this WSA would add 67,647 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. In addition, riparian vegetation and a few aspen stands may be found along Donnelly Creek. Table 2 summarizes the ecosystem information.



▒ RECOMMENDED FOR WILDERNESS – NONE

☐ RECOMMENDED FOR NONWILDERNESS

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE

▥ SPLIT ESTATE -NONE

▤ STATE – NONE

▨ PRIVATE – NONE

N

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MILES

Calico Mtns.
Proposal

NV-020-019
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Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	2	86,907	34	1,252,990

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039
Oregon				
Medford	31	2,440,081	21	730,038

C. Balancing the geographic distribution of wilderness areas: The Calico Mountains WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is capable of being managed as wilderness but it does have the following manageability concerns: 1,940 acres of valid, pre-FLPMA mining claims (3 percent of WSA); 369 acres of geothermal leases (less than one percent of WSA) and 271 acres of oil and gas leases (less than one percent of WSA).

Additionally, the WSA has a number of management concerns. They are the following: 18.5 miles of ways, easy access for ORVs (26,000 acres or 38 % of WSA), popular rock hounding areas and occasional military flights.

Energy and Mineral Resource Values

The mineral and energy potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts.): The entire WSA is rated as having potential for nonmetallic minerals (petrified wood) with 1,000 acres rated as being high and the remainder as being moderate. Six thousand, one hundred acres of the WSA are rated as having high metallic mineral potential (gold, silver, lead* and tungsten) and 9,500 acres rated as having moderate metallic mineral potential (gold, silver, antimony*, mercury* and uranium). Twenty-five thousand, nine hundred acres are rated as having high geothermal potential and 6,500 acres are rated as having moderate geothermal potential.

Based on surrounding current and past metallic mineral exploration/development, short-term interest within the Calico Mountain WSA is likely. This interest would result in the eventual development of a 600-acre open pit precious metal mine and associated three miles of access road along the southeast part of the study area. Development if one underground precious metal mine with associated 1/2 mile of access roads, waste dumps and staging area disturbing 20 acres would occur in the northwest portion of the WSA.

Precious metal exploration consisting of cross-country travel, one mile of drill roads and pads, dozer trenches and open cuts disturbing 25 acres would occur in the southeast and northwest portions of the WSA.

Geothermal exploration has subsided compared to the past, however, proposed developments are increasing in the surrounding areas. This interest would result in the eventual development of five small geothermal wellhead generators, supplying power and hot water for open pit mining, with associated well pads, two miles of access roads, pipelines and power lines, disturbing 50 acres in the southeast of the WSA. Geothermal exploration consisting of cross-country travel, small drill sites and 1/2 mile of access roads disturbing 10 acres would occur along the southwest side of the WSA.

New geologic data have been provided by Ferret Exploration Company, Inc., indicating a high probability for an economic precious metal deposit within the WSA. This WSA has also been nominated an "Area of Critical Mineral Potential" by Exxon Minerals Company.

There are 1,940 acres of mining claims, 271 acres of oil and gas leases, and 369 acres of geothermal leases in the WSA. There is no present production of any mineral or geothermal resources in the study area.

The total amount of projected disturbance resulting from energy/mineral activity would be approximately 705 acres.

In summary, quantities of various minerals are unknown but the potential for occurrence is from moderate to high throughout the WSA as identified in the Environmental Impact Statement.

Impacts on Resources

The comparative impact table (Table 4), on the adjacent page, summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on Wilderness Values	None of the 67,647 acres would receive long-term protection. Naturalness would be impaired on approximately 8% or 5,705 acres as a result of increase ORV use and surface disturbance from energy and mineral activity. Solitude would be adversely impacted on approximately 17% or 11,985 acres from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. The special features consisting of the colorful Calico Hills, Mormon Dan and Petrified Canyons would not receive long-term protection from ORV use or energy and mineral activity.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA except for 600 acres of valid discoveries in Mormon Dan Canyon. The special features would receive long-term protection except the Calico Hills and Mormon Dan Canyon where valid discoveries would impair the values.	Area Recommended For Wilderness: Wilderness values would be preserved on 58,800 acres, except on 600 acres of valid discoveries in the Mormon Dan Canyon. The special features of Petrified Canyon and Donnelly Peak would receive long-term protection. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 1% or 90 acres as a result of increased ORV use and energy and mineral activity. Solitude would be adversely impacted on approximately 3% or 300 acres from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. None of the special features are located in the portion recommended for wilderness.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal exploration, development of 1 large open pit and 1 small underground precious metal mine would be allowed.	Projected base-precious metal exploration and development of 1 small underground precious metal mine would be foregone. The projected development of 1 large open pit precious metal mine would be allowed due to valid discoveries.	Projected base-precious metal exploration and development of 1 small underground precious metal mine would be foregone. The projected development of 1 large open pit precious metal mine would be allowed in the area recommended for wilderness due to valid discoveries. Projected base-precious metal exploration opportunities would be allowed in the area not recommended for wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis Partial Wilderness
Impacts on the Level of Exploration for and Development of Geothermal Resources	Projected geothermal exploration and development of 5 small geothermal wellhead generators would be possible.	Geothermal exploration and development of would be foregone.	Geothermal exploration and development of 5 small geothermal wellhead generators would be foregone as they are located within the area recommended for wilderness. Geothermal exploration would be possible in the area not recommended for wilderness.
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the current 160 visitor hours to 350 hours annually.	160 visitor hours of current ORV use and 350 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on other public lands.	140 visitor hours of current ORV use and 310 hours of foreseeable future use would be displaced annually from the area recommended for wilderness. This use would be absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 20 visitor hours to 40 hours annually.

Local Social and Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 16 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunities for solitude.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public hearings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the nine oral comments received, one supported more wilderness than the proposed action at that time (designation of 58,800 acres as wilderness), five supported the draft proposed action and three supported less wilderness than the, then, proposed action. Of the 77 written comments received during the 90-day comment period, five supported more wilderness than the draft EIS proposed action, 54 supported that proposed action and 18 supported less wilderness.

Pershing County (with about 10 percent of the WSA) wants to preserve all public lands within the county's boundaries as multiple use areas. No comments were received from Humboldt County agencies or officials.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "The Calicos are the most extensively mineralized of the WSA's in this BLM District. Our Department of Minerals and the mineral industry feel strongly that this area should not be designated a wilderness area.

The local governments of Humboldt and Pershing counties agree that it is not a desirable wilderness area. We realize that this is a beautiful mountain range, with its many colored rock formations. However, this area is important to the State as an area open for mineral exploration and development and should not be designated as wilderness." This letter was in response to the Draft Environmental Impact Statement.

The U.S. Air Force said it supported wilderness designation provided no restrictions were placed on military flights. It said it will work with the BLM if military flights create problems in some areas.

No comments were received on the Final EIS.

SELENITE MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 32,041 acres

The Selenite Mountains WSA (NV-020-200) is located in western Pershing County, with a small portion in eastern Washoe County, Nevada. It is about 2 miles southeast of Gerlach and a 2 hour drive from Reno. The WSA includes 32,041 acres of public land and surrounds 167 acres of private land (Table 1).

The study area is bordered on the northeast and north by the High Road (identified as State Route 48) until it meets BLM Road 2084. The WSA perimeter then proceeds south along this road until it hits the North Duque Springs Road, which it follows until such time that it reaches Duque Springs. The boundary then jockeys around private land and returns to the road but then proceeds south along BLM Road 2092. This forms the southern portion of the eastern boundary. Four miles south of Duque Springs, an unnamed way in Section 11 proceeds west to form part of the southern boundary for 1 1/2 miles. When the road crosses the section line between Sections 9 and 16, the boundary continues due west along section lines for 2 1/2 miles until it reaches the midpoint of Section 12. At this time, the boundary proceeds north for 3 miles until it hits the section line between Sections 30 and 31. The boundary continues west for approximately 1 1/2 miles until it reaches State Route 34. The border of the WSA then heads north until it connects once more with the High Road.

The Selenite Mountains WSA runs approximately 13 miles north-south and between 3 and 5 miles east-west. It straddles the north end of the Selenite Range, a north-south range flanked by alluvial desert basins. There are no known riparian areas although there are some small juniper stands. The elevation ranges from 3,980 feet to 7,115 feet. Three distinct landforms can be found: the main ridge axis, the narrow fringing desert piedmont on the northwest side and the footslope on the southeast side.

The main ridge is predominantly eroded granite and basaltic flows, with several dominant drainage systems on the west and northwest sides running perpendicular to the ridge axis. The landform is mostly rolling with a few steep granitic rock outcrops and cliff areas. There are noticeable wave-cut terraces from Pleistocene Lake Lahontan on the northwest side.

The fringing desert piedmont on the northwest side is an abrupt transition from the steeper ridge axis. It is characterized by conical alluvial fans and roughly parallel drainages.

The footslope on the southeast side is similar to the main ridge axis except that it is less steep and has a lower elevation. This section drops slowly from the main ridge to the desert valley in the east. There are numerous shallow parallel drainages, and the terrain is predominantly rolling to flat with a few scattered granitic rock outcrops.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September 1987. There were two alternatives: an all wilderness alternative and a no wilderness alternative which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 32,041 acres recommended for nonwilderness

The recommendation for this WSA is to release all 32,041 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

While the wilderness values met the criteria for wilderness study, the WSA was recommended for uses other than wilderness due to potentially moderate (25% of WSA) to high (25% of WSA) geothermal values, moderate mineral values (40% of WSA) and significant outside sights and sounds.

It is conjectured that short term metallic mineral interest within the WSA is likely. This interest would result in exploration that would incorporate cross-country travel, 2 miles of drill roads, drill pads, dozer trenches and dozer cuts. Proposed geothermal actions are increasing in the surrounding area. These actions would result in the eventual development of one 10-megawatt geothermal power plant with associated well pads, access roads, powerlines, pipelines, cross country travel and powerplant structures.

A major gypsum mine is adjacent to the study area and its operation detracts significantly from the naturalness and solitude of the WSA. Dust and noise caused by the excavation of materials, coupled with large trucks hauling the material to the plant located in the small town of Empire and the plant operations all combine to reduce the area's wilderness qualities.

In summary, because of the moderate mineral potential, the high geothermal potential, and the significant outside sights and sounds, the recommendation for this WSA is to provide for access to potential mineral resources and to not manage it as wilderness.

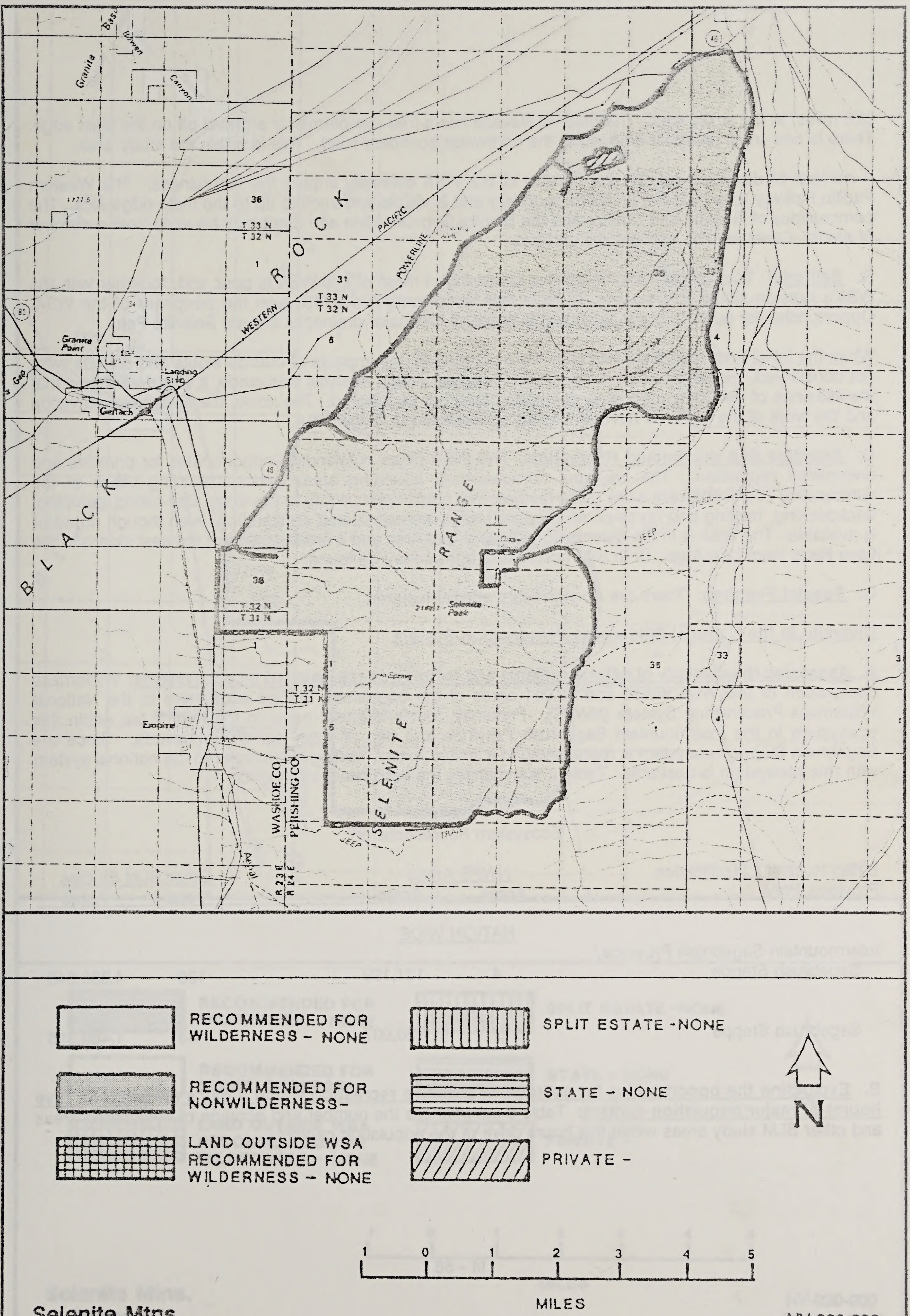
Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	32,041
Split Estate (BLM Surface Only)	0
Inholdings (State, Private)	167
Total	32,208
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	32,041
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	32,041
Inholdings (State, Private)	167

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The Selenite Mountain WSA is considered primarily natural. The study area straddles the north end of the Selenite Range, a north-south mountain range flanked by alluvial desert basins. There are three types of landforms: the main ridge axis, the narrow fringing desert piedmont on the northwest side and the footslope on the southeast side. The one grazing allotment present includes a corral in the center of the WSA. A number of parallel drainages are present, as well as thirteen ways



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(9.8 miles) in the study area. The State of Nevada has a free-use-permit for a gravel pit on the west edge. There is one small prospect area along the northwest boundary road. This is within the study area.

A number of developments on the outside of the WSA definitely impact the naturalness. The Western Pacific Railway runs near the northern boundary and is visible and audible up to the main ridge axis. The communities of Gerlach and Empire and the Empire Gypsum Mine and Plant may be seen from a number of areas. Other outside impacts are minimal.

B. Solitude: Topographic and vegetative screening in most of this WSA is poor and, together with the WSA's outside sights and sounds, there is little opportunity for solitude on the periphery of the WSA. Opportunities for solitude are outstanding in some of the major drainages around Selenite Peak.

When the Initial and Intensive Inventories were conducted, the impacts of outside sights and sounds were not considered. However, when the final EIS Proposed Action Analysis was made, it was determined that the influence of the adjacent mining operation could not be ignored. The noise, the dust, the excavation and the work at the plant, all have an impact on the solitude of the WSA.

C. Primitive and Unconfined Recreation: This WSA offers outstanding opportunities for primitive and unconfined recreation. The wave-cut terraces, rock hounding areas and outstanding views of the surrounding countryside are a few of the features that could draw people to this area. Day-hiking, camping, backpacking, hunting and horse-packing opportunities are considered outstanding, even though no water is available. The WSA is in the Selenite Range Herd Use Area and a small portion of the east side is in the Lava Beds Herd Use Area. Both wild horses and burros may be found.

D. Special Features: There are no significant special features.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 32,041 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	1	86,907	33	1,469,316

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of the population centers.

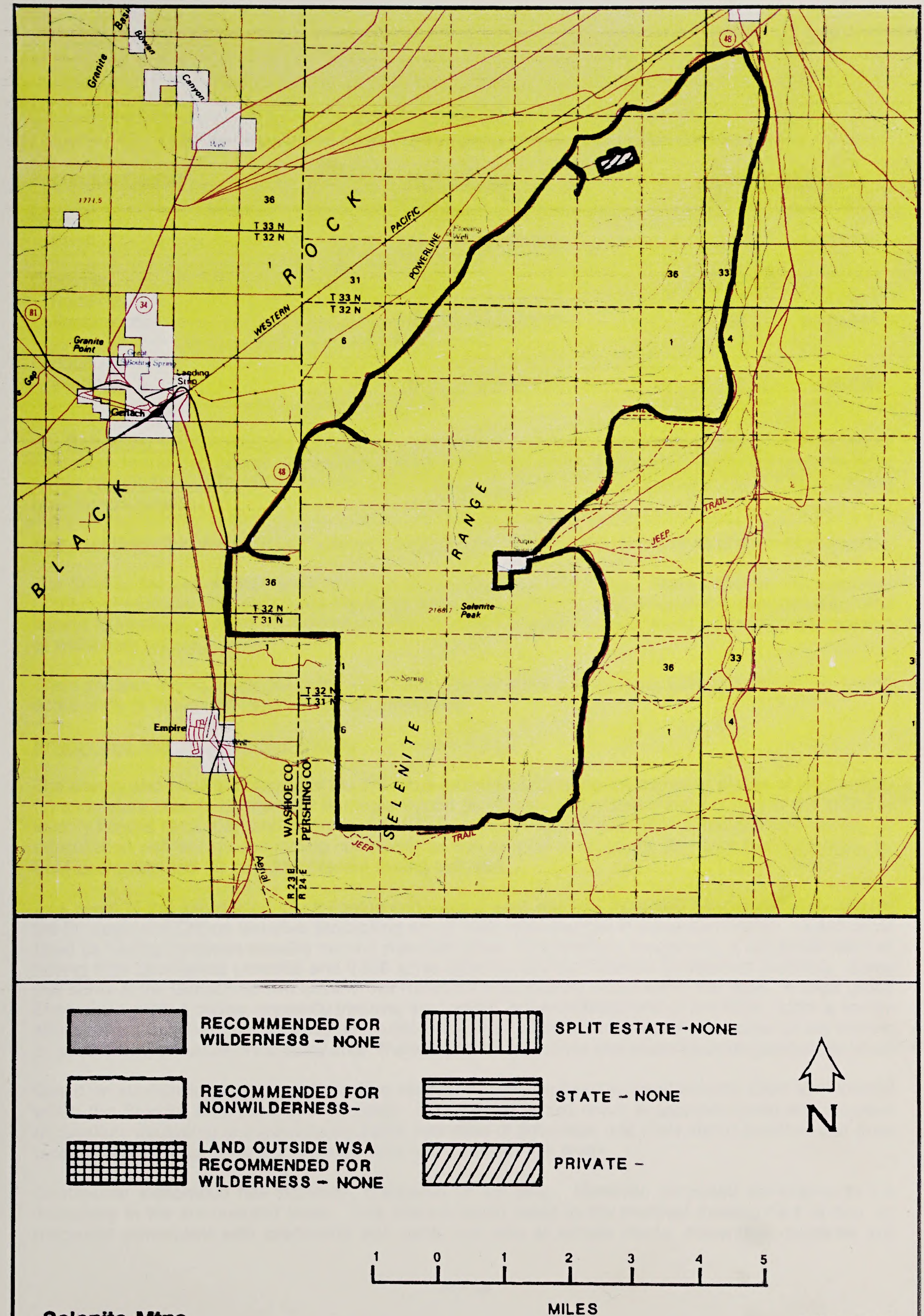

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Table 3
Wilderness Opportunities For Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Oregon				
Medford	31	2,440,081	21	730,039

C. Balancing the Geographic Distribution of Wilderness Areas: The Selenite Mountains WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of the WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The Selenite Mountains WSA is capable of being managed as wilderness. There could be manageability problems associated with the private inholdings (167 acres), since the BLM is required to provide reasonable access to inholding owners. Construction of access roads through the area would be an additional erosion of wilderness values.

There are also management concerns associated with 9.8 miles of ways, easy ORV accessibility on 14,000 acres (44% of WSA) and frequent military overflights.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 14,400 acres rated as having moderate metallic mineral potential (silver, molybdenum, tungsten*), 8,400 acres rated as having high geothermal potential and 9,500 acres rated as having moderate geothermal potential. Some 960 acres of the Gerlach Known Geothermal Resource Area (KGRA) occur within the WSA. A small group of patented mining claims, presently inactive, are located in the northern end of the WSA. Little is known about mineralization or past activities on the patented claims. There is no present production of any mineral or geothermal resources in the study area. There are no mining claims and no acres under geothermal lease.

Based on surrounding current and previous metallic mineral exploration/development, short term interest within the Selenite Mountains WSA is likely. This interest would result in precious metal and tungsten exploration, consisting of cross-country travel, two miles of drill roads, and pads, dozer trenches and open cuts disturbing 10 acres in the Arcturus Mine and Selenite Peak areas.

Geothermal exploration has subsided, compared to the past. However, proposed developments are increasing in the surrounding areas. This interest would result in the eventual development of one 10-megawatt powerplant with associated well pads, 1/2 mile of access roads, powerlines, pipelines and powerplant structures, disturbing 20 acres in the southwest side of the WSA. Geothermal exploration consisting of cross country travel, small drill sites and 1/2 miles of access roads, disturbing 10 acres would occur along the north and northeast side of the WSA.

In summary, quantities of various mineral and energy resources are unknown, but the potential for occurrence is moderate through 40% of the WSA and there is high potential for geothermal resources in one-fourth of the study area and moderate potential for another fourth.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness
Impacts on Wilderness Values	None of the 32,041 acres would receive long term protection. Naturalness would be impaired on approximately 6% or 2,060 acres as a result of increased ORV use and energy and mineral activity. Solitude would be adversely impacted on approximately 3% or 850 acres as a result of increased ORV use and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. The only special feature - the Pleistocene Lake Lahontan terraces - would not receive long-term protection from ORV use and energy activity.	The wilderness values of naturalness, solitude and primitive recreation would be preserved throughout the WSA. The special feature - wave cut terraces of ancient Lake Lahontan - would receive long-term protection.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal exploration opportunities would be possible.	Base-precious metal exploration opportunities would be foregone.
Impacts on Exploration for and Development of Geothermal Resources	Projected geothermal exploration and development of 1 small geothermal power plant would be allowed.	Geothermal exploration and development of 1 small geothermal power plant would be foregone.
Impacts on Recreational Off-Road Vehicle Use	ORV use would grow from the current 80 visitor hours to 175 hours annually.	80 hours of current ORV use and 175 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.

Local Social and Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 21 comments that were received addressed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: opportunities for solitude and primitive recreation, special features and naturalness. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunities for solitude. These comments were addressed to the entire 56,320 acres of the original study area. About 24,000 acres have since been released from wilderness consideration.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public hearings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983.). No oral comments were received. Eleven written comments were received . Of them, three supported more wilderness than the draft EIS Proposed Action (no wilderness) and eight supported the Proposed Action. Some comments mentioned the roads and private property within the WSA as well as lack of water, solitude and recreational opportunities. Others wanted to preserve the wildlife, scenery and opportunities for primitive recreation.

Pershing County wants to preserve all public lands within the county's boundary's as multiple use areas.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We concur that the Selenites are not suitable for wilderness designation. Wilderness quality is limited, and the area has extensive mineral values, as well as management problems." This letter was in response to the draft EIS.

The U.S. Air Force said it supported wilderness designation provided no restrictions were placed on military flights. It said it will work with the BLM if military flights create problems in some areas.

No comments were received on the Final EIS.

MOUNT LIMBO WILDERNESS STUDY AREA

1. THE STUDY AREA - 23,702 acres

The Mount Limbo WSA (NV-020-201) is located in western Pershing County, about 50 miles north of Wadsworth, Nevada, and about a 1 1/2 hour drive from Reno. The WSA includes 23,702 acres of public land and surrounds 81 acres of private land (Table 1).

The western boundary of the WSA is bordered by two powerline roads. Two deviations from these roads occur where additional roads and mining disturbances cut into the WSA to the east. The northern boundary is formed along legal lines near Jenny Creek. The eastern boundary is formed partially by the East Selenite Range Road and a parcel of private land. At a three way road junction in Section 10 the boundary continues on the western most road to an unnamed spring. At the spring, the boundary heads to the east and returns to the East Selenite Range Road which runs south into the Jayhawk Well Road. This road meets the powerline road at the southern point of the WSA.

The Mount Limbo WSA straddles the southern tip of the Selenite Mountains, a typical mountain of the Basin and Range Geomorphic Province. The elevation of the study area ranges from 3,880 feet to 8,237 feet. Three distinct landforms are found within the WSA: that portion of the Selenite Mountains ridge crest that is granitic; that portion of the Selenite Mountains ridge crest that is basaltic; and the fringing desert piedmont. The granitic portion of the ridge crest is in the northern three-fourths of the WSA. It is a single granitic ridgeline of steep angular, landforms with a distinctly serrated appearance and three major peaks: Kumiva Peak, Mount Limbo and Purgatory Peak. This section has shallow drainage systems running perpendicular to the main ridge crest and includes granitic rock outcrops and granitic boulder slopes. Two aspen groves and four meadow areas are along the drainages in the vicinity of Kumiva Peak. All of the Utah juniper in the WSA is in this landform.

The basaltic section of the Selenite Mountains is distinctly more rounded and darker from the granitic ridgeline to the north and is dominated by a west facing escarpment. This area is nearly flat in the east with slopes exceeding 100% in the west. This part of the WSA is minimally eroded with shallow drainage systems on the west side and is separated from the granitic ridge crest by a distinct southwest-northeast drainage southeast of Mount Limbo. The fringing desert piedmont is flat to gently sloping with shallow parallel drainages separated by low ridges.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September 1987. There were four alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 12,900 acres (including 200 outside of the WSA) would be designated as wilderness and 11,002 acres would be released for uses other than wilderness, another partial alternative where 12,750 acres (including 50 acres outside of the WSA) would be designated as wilderness and 11,002 acres would be released for uses other than wilderness which is the recommendation in this report, and a no wilderness alternative.

2. RECOMMENDATION AND RATIONALE - 12,750 acres recommended for wilderness
11,002 acres recommended for nonwilderness

The recommendation for this WSA is to designate 12,750 acres as wilderness (including 50 acres outside the WSA) and to release 11,002 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long-term. The partial wilderness alternative, the recommendation of this report, would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The portion recommended for wilderness includes a ridge crest presently free of human imprints, a primarily natural landscape and outstanding opportunities for a diverse number of recreation activities. Activity options include: primitive and unconfined recreation, day hiking, rock and mountain climbing, nature study, hunting and outstanding opportunities for solitude. Portions of the area recommended for wilderness are extremely rugged. Granite outcrops, most of which are situated near the ridgeline, break up what could be a monotonous line. Two large aspen groves offer shelter and solitude to the visitor. If this area is designated as wilderness it would offer a mountainous desert terrain with intriguing canyons to the National Wilderness Preservation System.

The recommendation for the Mount Limbo WSA emphasizes maintaining access to a portion of the WSA for mineral exploration and extraction and for recreation purposes. Large portions of the WSA have potential for the occurrence of a diverse group of mineral resources including hardrock locatable minerals, and saleable mineral and geothermal possibilities. There is moderate potential for geothermal resources and a moderate potential for occurrence of tungsten, uranium, molybdenum, feldspar and beryl. Tungsten is on the list of Strategic and Critical Materials. The recommendation permits exploration and development of these energy and mineral resources.

The moderate potential for occurrence of a diversity of mineral resources in the different parts of the WSA is sufficient evidence to conclude that in the future this area could produce quantities of important mineral resources.

The development of mineral and energy resources in this WSA will cause the loss of wilderness values. Such actions would probably affect 4,500 acres or more of the WSA. It was felt that the partial wilderness recommendation would incorporate the area with the highest wilderness values while excluding those portions with the highest mineral values.

Another major reason for this recommendation was the amount of ORV use the WSA receives, especially by upland game hunters. By placing the boundary of that portion recommended for wilderness at the base of the mountain range and eliminating the easily accessible flats, it was felt that access to hunting areas would still be obtainable. One thousand acres of the recommended portion (12% of the total ORV accessible land in the WSA) would still be physically accessible to vehicles.

There are 50 acres outside of the study area that are also being recommended for wilderness. They were included to make a more manageable boundary.

It is projected that even after mineral exploration and development and ORV use much of the area will retain wilderness characteristics.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	23,702
Split Estate (BLM surface only)	0
Inholdings (State, Private)	81
Total	23,783
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	12,700
BLM (Outside WSA)	50
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	12,750
Inholdings (State, Private)	41
Within the Area not Recommended For Wilderness	
BLM	11,002
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	11,002
Inholdings	40

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

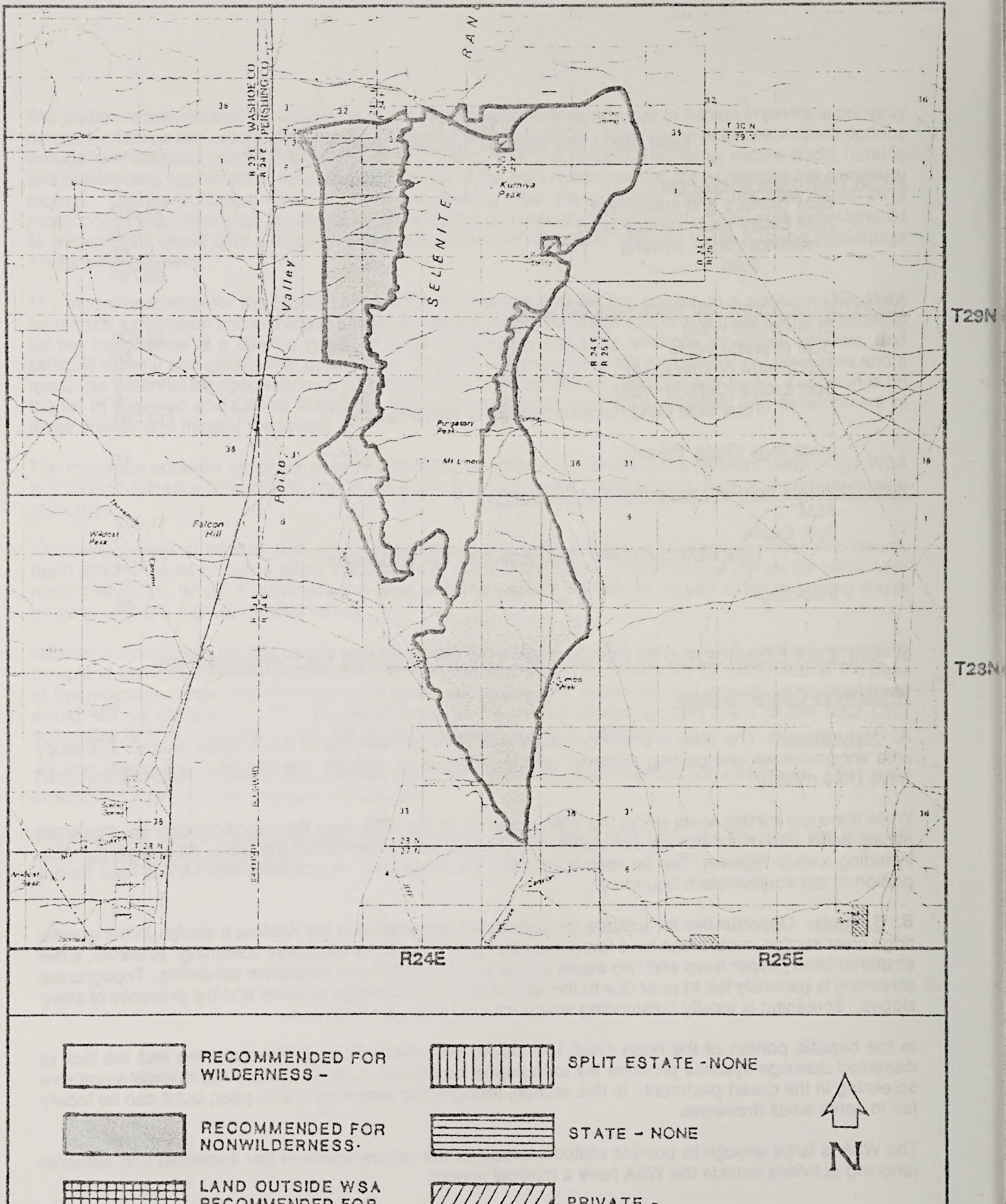
A. Naturalness: The WSA is primarily natural with few improvements in the Selenite Range. The study area encompasses one grazing allotment with two developed springs, one reservoir, one corral, and 14 ways (16.9 miles).

While there are mining areas within the WSA, adjacent to the WSA, near the west boundary are two small mining areas with minor surface disturbance which can be seen from within the WSA. Also, several roads, including a state highway, can be seen from inside the study area. A powerline and service road form a portion of the southwestern boundary.

B. Solitude: Opportunities for solitude are considered outstanding in the WSA as a whole. In the granitic ridge crest section, most areas have low shrubs that provide minimal vegetative screening. However, a few scattered Utah juniper trees and two aspen stands provide good local vegetative screening. Topographic screening is generally fair to poor due to the lack of dissected drainage systems and the presence of steep slopes. Screening is locally outstanding where rock outcrops are common.

In the basaltic portion of the ridge crest, low shrubs give minimal vegetative screening and the lack of dissected drainage systems provides fair topographic screening. Low shrubs provide minimal vegetative screening in the desert piedmont. In this section, topographic screening is also poor, but it can be locally fair in some small drainages.

The WSA is large enough to provide solitude, except at the narrow southern tip. Localized and seasonal ranching activities outside the WSA have a minimal impact.



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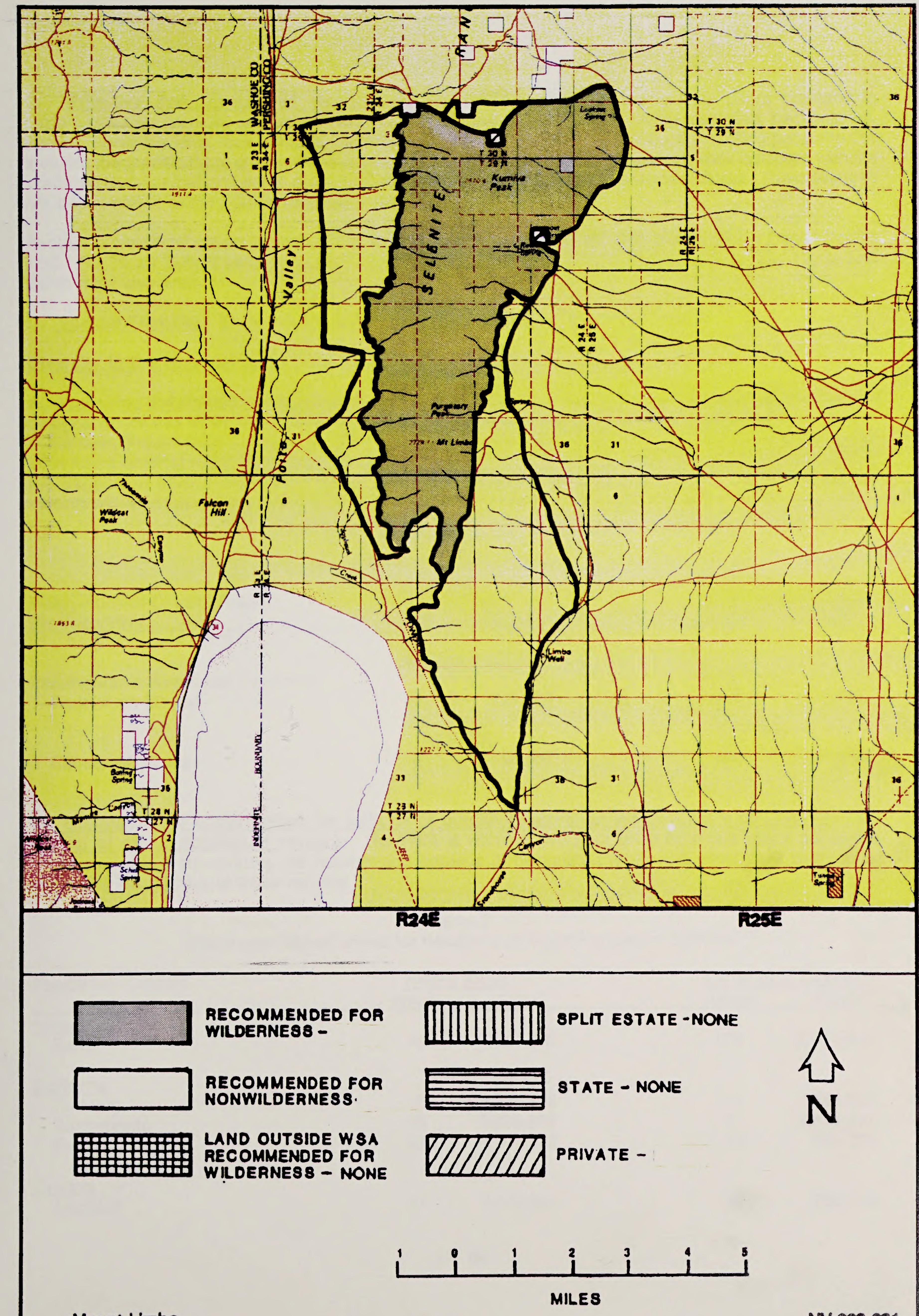

Mount Limbo
Proposal

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C. Primitive and Unconfined Recreation: The WSA's size and topography offers outstanding opportunities for primitive and unconfined recreation activities such as day-hiking, camping, backpacking, hunting, horse-packing, rock climbing and scrambling and nature study. Attractions that bring people to this area are the granitic ridge crests, views of surrounding desert landforms and granitic rock outcrops with the scattered Utah juniper and some of the best mountain climbing in the Winnemucca District. These features are concentrated in the portion recommended suitable.

Another recreational aspect is the fact that the WSA is on the route of the proposed National Desert Scenic Trail. For those people who enjoy viewing wild horses, the study area is in the Selenite Wild Horse and Burro Herd Use Area.

D. Special Features: There are no special features in this WSA.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 23,602 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS include this ecosystem which is within the Intermountain Sagebrush Province and two of them are within Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
NATION WIDE				
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
NEVADA				
Sagebrush Steppe	2	86,907	34	1,252,990

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive from five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Fresno	37	4,101,852	28	460,790
Oregon				
Medford	31	2,440,081	21	730,038

C. Balancing the geographic distribution of wilderness areas: The Mount Limbo WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

That portion of the study area being recommended for wilderness designation can be managed as wilderness. The only manageability concern is a 41 acre parcel of private land located near the northeast boundary. There would also be management concerns dealing with the 1,000 acres of ORV accessible land and the 3.9 miles of ways.

The remainder of the WSA can also be managed as wilderness although there are 40 acres of private land present. There would be management concerns with the 13 miles of ways present.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) past and present mining activities and (7) a U.S. Geological Service/Bureau of Mines report on the mineral potential of the area recommended for wilderness.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts); 4,950 acres of land are rated as having moderate metallic mineral potential (tungsten*, uranium, molybdenum), 19,300 acres are rated as having moderate nonmetallic mineral potential (feldspar and beryl), and 6,400 acres are rated as having moderate geothermal potential.

There are no mining claims or geothermal or oil and gas leases in the WSA. There is no present production of any mineral or geothermal resources in the study area.

The U.S. Geological Survey, in conjunction with the Bureau of Mines, completed a survey of the recommended area. As a result of that survey, they concluded that approximately 1,940 acres of the recommended area had moderate metallic mineral potential (gold and silver). Elsewhere, it was considered to be low as is the geothermal potential. The geologic formation is unfavorable for the accumulation of oil and gas resources.

In summary, quantities of various minerals are unknown, but the potential for occurrence is moderate in portions of the WSA as identified in the Environmental Impact Statement.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effect of pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)	No Wilderness
Impacts on Wilderness Values	Area Recommended For Wilderness: Wilderness values would be preserved on 12,750 acres. The special features - Kumiva and Purgatory Peaks and Mount Limbo - are in this area. Area Not Recommended For Wilderness: Wilderness would be impaired on approximately 54% or 5,955 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on about 3% or 298 acres from increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decrease due to increased ORV use, energy and mineral activity and vegetative manipulation. None of the special features are located in the area not recommended for wilderness.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA. The special features - Kumiva and Purgatory Peaks and Mount Limbo - would receive long-term protection.	Area Recommended For Wilderness: Wilderness values would be preserved on 12,900 acres. The special features - Kumiva and Purgatory Peaks and Mount Limbo - are in this area. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 35% or 8,370 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on about 3% or 298 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation. None of the special features are located in the areas not recommended for wilderness.	Naturalness would be impaired on approximately 35% or 8,370 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on about 3% or 298 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation. None of the special features would receive long-term protection from ORV use, energy and mineral activity and vegetative manipulation.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)	No Wilderness
Impacts on Exploration for Non-Energy Mineral Resources	Base-precious metal exploration and development would be foregone in the area recommended for wilderness.	Base-precious metal exploration and development opportunities would be foregone.	Same as Proposed Action.	Projected base-precious metal exploration and development would be possible.
Impacts on the Level of Exploration for Energy Resources	No energy exploration or development is expected in the area recommended for wilderness. Projected geothermal exploration would be possible in the area not recommended for wilderness.	Geothermal exploration opportunities would be foregone.	Same as Proposed Action.	Projected geothermal exploration opportunities would be possible.
Impacts on Motorized Recreational Vehicle Use	10 visitor hours of current ORV use and 25 hours of foreseeable future use would be displaced annually in the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 70 visitor hours to 150 hours.	80 visitor hours of current ORV use and 175 hours of foreseeable future use would be displaced. This use would be easily absorbed on adjacent lands.	10 visitor hours of current ORV use and 25 hours of foreseeable use would be displaced annually from the portion recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 70 visitor hours to 150 hours.	ORV use would grow from the current 80 visitor hours to 175 hours annually.
Impacts on Range Condition	Approximately 1,920 acres of proposed vegetative manipulation would not be permitted under wilderness management. There would be no change in range condition.	The proposed vegetative manipulation project would not be permitted under wilderness management. There would be no change in range condition.	Approximately 1,920 acres of proposed vegetative manipulation would not be permitted under wilderness management and range condition would not change.	The proposed vegetative manipulation project would result in an improvement of range condition on 5,350 acres.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 18 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were these: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were the following: other resource values, roads, intrusions and lack of outstanding opportunities for solitude. These comments addressed the entire 33,280 acres of the original study area. About 10,000 acres have since been released from wilderness consideration.

During the 90-day comment period on the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the seven oral comments received, one person supported more wilderness than the proposed action in the draft EIS while six people supported the draft EIS (12,750 acres recommended for wilderness). Forty-six of the fifty-six written comments received also agreed with the draft EIS while four people supported more wilderness and six people supported less. The following items were mentioned in the comments: lack of solitude and recreation, private lands, human imprints, mineral resources and the need for vehicle access. Other people discussed the need to save from development the naturalness, springs, wildlife and scenery as well as recreational opportunities and convenience because of the proximity to Reno.

Pershing County wants to preserve all public lands within the county's boundaries as multiple use areas.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "Mt. Limbo is certainly a dramatically beautiful sight from Highway 447 below. However, its designation as wilderness is opposed by most state agencies. The area receives heavy recreational use by hunters and hikers from the Reno metropolitan area, most of whom drive deep into the area along the many roads and ways on the eastern slopes. The Department of Wildlife feels that the loss of these accessways would have a serious negative impact upon the area's usefulness for hunting. The area also has moderate mineral potential and is opposed by the Department of Minerals. We note that the sense of solitude is diminished by the view of the busy highway below. We also note that the designation of this wilderness area is opposed by Pershing County. On balance, we conclude that it is not in the State's best interest to have this area designated as wilderness." The letter was in response to the Draft Wilderness Environmental Impact Statement.

A consistency letter from the Governor (July 12, 1984) thanked the BLM for following their suggestions in the December 30 consensus letter on three of the five WSAs on which there was disagreement. The Governor then said," Based upon the information available to us at this time, we will not protest the recommendations of the PFEIS under the Governor's consistency review provisions of your Planning Regulations....We will continue to study the resources and needs of these areas, and look forward to continuing to work with you on the consideration of wilderness."

The U.S. Air Force said it supported wilderness designation as long as it did not interfere with military flights. It said it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

APPENDIX 1

ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION[1]

Legal Description	Total Acreage	Number of Owners	Type of Ownership by Estate		Presently Proposed for Acquisition	Preferred Method of Acquisition	Estimated Costs of Acquisition	
			Surface Estate	Sub-Surface Estate			Land	Processing
Parcel #1 T.29N., R.24E., MDM Sec. 3, NE1/4NE1/4	41	1	Private	Private	No	Purchase	$4,100	$3,000

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[1] The estimated costs listed in this Appendix in no way represent a federal appraised value of the lands, but are rough estimates based upon sales of lands with similar characteristics to those included in the WSA. The estimates are for the purpose of establishing a range of potential costs to the government of acquiring non-federal holdings and in no way represents an offer to purchase or exchange at the cost estimates.

CHINA MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA - 10,358 acres

The China Mountain WSA (NV-020-406P) is located in eastern Pershing County, about a 5 hour drive east of Reno, Nevada. The WSA includes 10,358 acres of public lands and surrounds 80 acres of private lands (Table 1).

The WSA is bordered by the West Buffalo Valley Road and private lands on the east side, the Cherry Creek Canyon Road on the north, the crest of the Tobin Range on the west and an unnamed road leading to a spring as the south boundary. The WSA measures approximately 7 miles north-south and varies between 2 and 3 miles east-west. Private land creates a 1-mile indentation in the southeast.

The WSA is part of the east slope of the Tobin Range. The terrain has a high elevation plateau, steep cliffs and rolling hills on the east slope; elevations range from 5,060 to 8,842 feet. There are two main canyons within the mountain range and several smaller canyons. The vegetation is primarily sagebrush with some pinyon-juniper and riparian vegetation along the canyon bottoms.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in 1987. There were three alternatives analyzed in the document: an all wilderness alternative, a partial wilderness alternative where 8,900 acres would be designated as wilderness and 1,458 acres would be released for uses other than wilderness, and no wilderness, which is the recommendation in this report. The partial alternative would have included 1,700 acres not in the WSA.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness
10,358 acres recommended for nonwilderness

The recommendation for this wilderness is to release all 10,358 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

In this WSA, the mineral and geothermal potential outweigh the wilderness values. The WSA is recommended for uses other than wilderness due to 5,500 acres being rated high for metallic minerals (gold; silver, lead, zinc, copper, tungsten, mercury and antimony), all 10,358 acres rated being moderate for nonmetallic minerals (barite, limestone and dolomite) and 2,000 acres of land being rated moderate for geothermal steam. There are 232 acres of existing oil and gas leases and 500 acres of mining claims.

It is projected that short-term mineral interest is likely in the China Mountain WSA. This interest would result in a 300 acre (100 acres in WSA) open pit mine plus an additional 15 acres of disturbance caused by dozer trenches, cross-country travel and open cuts. There would also be 3 miles of drill roads.

Although geothermal exploration has been decreasing, proposed developments are increasing in the surrounding areas. Exploration consisting of cross-country travel, small drill sites and 1/2 mile of drill access road would disturb five acres. If other claims are developed, as they are likely to be, then the added noise and visual pollution would reduce the wilderness values by the creation of access roads, the development of a mining or geothermal operation and the actual extraction of an ore body.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	10,358
Split Estate (BLM surface only)	0
Inholdings (State, private)	80
Total	10,438
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	10,358
Split Estate	0
Total BLM Lands Not Recommended for Wilderness	10,358
Inholdings (State, Private)	80

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

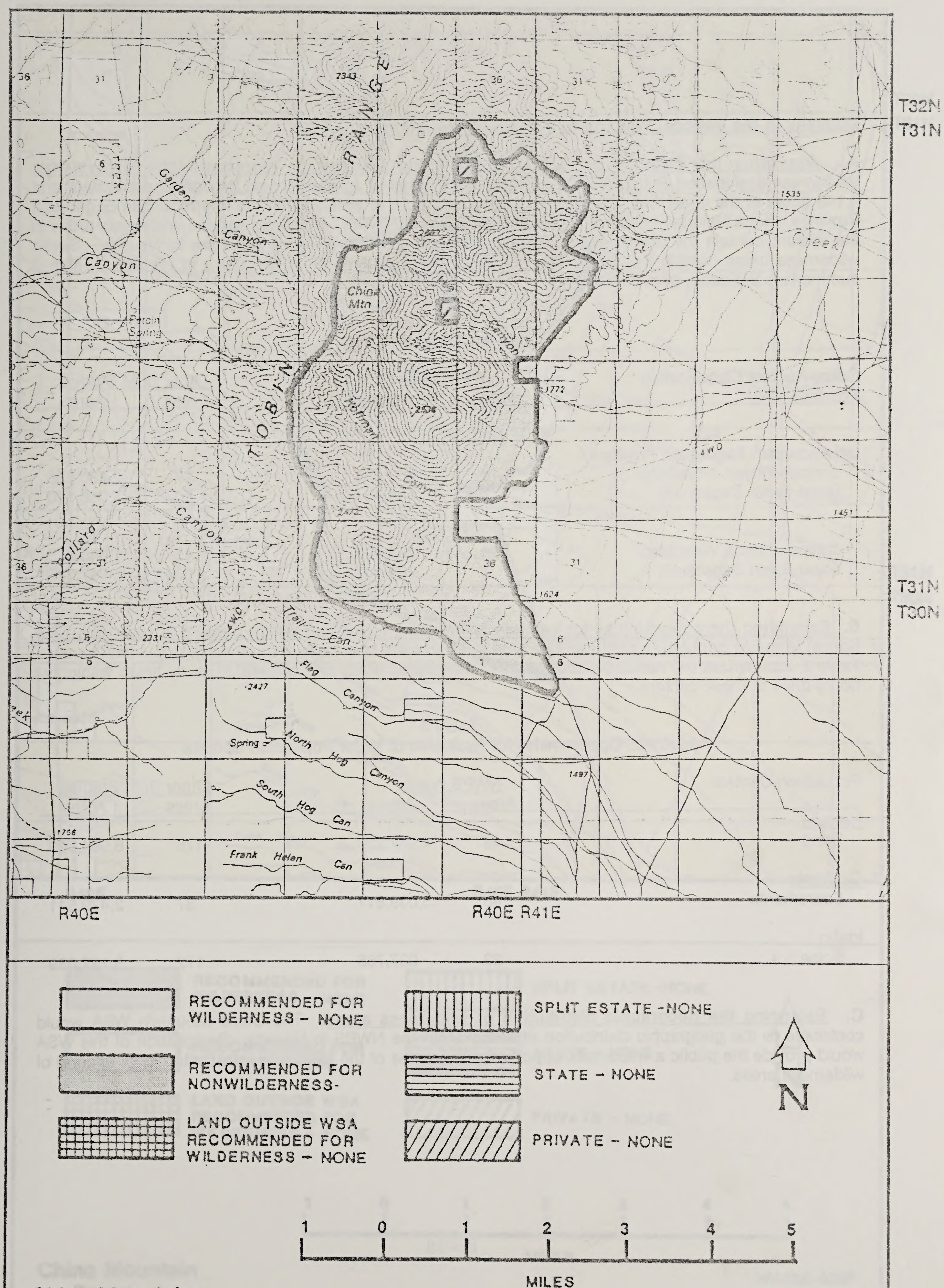
A. Naturalness: The China Mountain WSA is predominantly natural with most of the WSA free of human imprints. The WSA is part of the east slope of the Tobin Range. The terrain has a high elevation plateau, steep cliffs and rolling hills on the east slope; elevations range from 5,060 to 8,842 feet. There are two main canyons within the mountain range and several smaller canyons.

Most of the range improvements, including developed springs, reservoirs, water troughs, a pipeline and a fence, are mainly near the borders. Three vehicle ways (1.8 miles) extend into the unit. The main impact of sight and sound comes from the mining area immediately to the north of the WSA.

B. Solitude: Opportunities for solitude are considered outstanding. Vegetative and topographic screening are excellent in the main canyons, and there is little to disturb the visitor. There is some localized and seasonal ranching activity and light traffic on the roads to the east of the WSA.

C. Primitive and Unconfined Recreation: Opportunities for primitive and unconfined recreation are considered to be outstanding. Day-hiking, camping, backpacking, hunting, rock climbing and nature study are particularly noteworthy. The China Mountain plateau as well as Hoffman and Lee Canyons are exceptionally scenic. There is a fair fishery habitat for brown, cutthroat and rainbow trout in Hoffman Canyon. The China Mountain Herd Use Area encloses the WSA and offers an opportunity for those people who want to see wild horses.

D. Special Features: There are no special features in the WSA.



China Mountain Proposal

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Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 6,215 acres of Juniper-Pinyon Woodland ecosystem and 4,143 acres of the Great Basin Sagebrush ecosystem, both of which are in the Intermountain Sagebrush Province, to the National Wilderness Preservation System (NWPS). Presently, sixteen wilderness areas in the system contain the Juniper-Pinyon Woodland ecosystem, and ten of these are in Nevada. Seven wilderness areas contain the Great Basin Sagebrush ecosystem, all of which are in Nevada. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

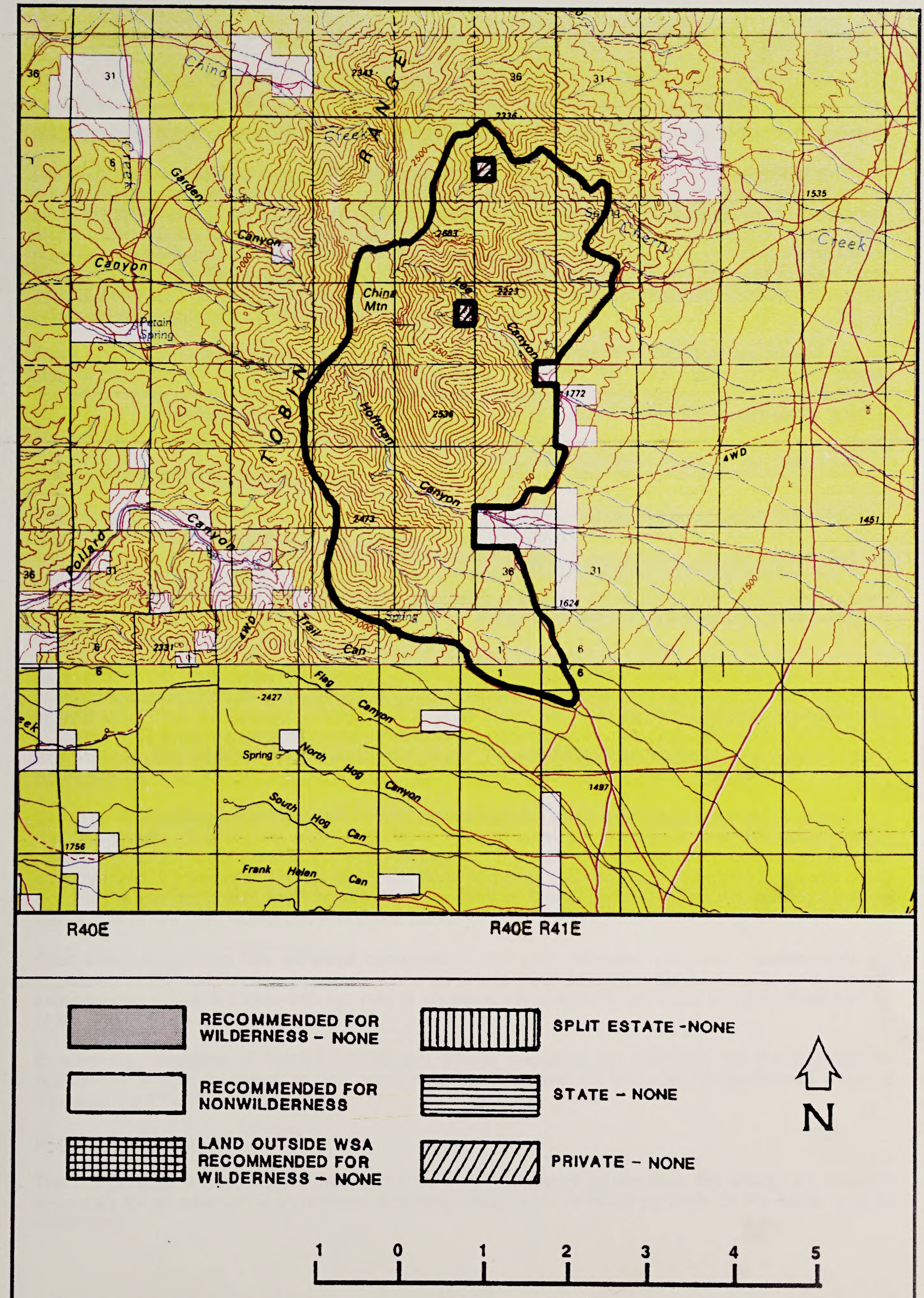
Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Juniper-Pinyon Woodland	16	362,556	77	2,250,026
Great Basin Sagebrush	7	104,407	60	1,083,540
	NEVADA			
Juniper-Pinyon Woodland	10	268,900	45	1,645,628
Great Basin Sagebrush	7	104,407	38	847,326

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of three major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039

C. Balancing the geographic distribution of wilderness areas: The China Mountain WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public a wilderness opportunity in an area of the state presently limited in its offering of wilderness areas.



China Mountain Proposal

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Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is capable of being managed as wilderness. There will, however, be manageability problems associated with the following concerns: private inholdings (80 acres), pre-FLPMA mining claims (500 acres, 5% of the WSA), and oil and gas leases (232 acres, 2% of the WSA). If any of these parcels are developed, as the owners/possessors would have the legal right to do, intrusions created by mining, drilling or many other operations would seriously impact the wilderness values present. Noise, dust and visual intrusions are a few of the impacts. Reasonable access to allow the possessors of these claims and leases to reach these parcels would also have to be granted. This would involve new roads scarring up the countryside and the additional noise and dust caused by vehicles working in the area.

There would also be management problems associated with the ways (1.8 miles) that are present and the easy accessibility for ORVs (1,000 acres or 10 percent of WSA). The configuration of the 'V' shaped southeast corner and the difficulty of locating the western boundary (formed by topographic features) would also create management concerns. Individuals would want to create a 'short cut' across the 'V' shaped section, thus creating a new road or way.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating mineral sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities. There are 500 acres of preFLPMA mining claims and 232 acres of oil and gas leases in the WSA. There is no present production of any mineral or geothermal resources from the study area.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 5,500 acres of land rated high for metallic minerals (gold, silver, lead*, zinc*, copper*, tungsten*, mercury*, and antimony*), 10,358 acres rated moderate for nonmetallic minerals (barite, limestone and dolomite) and 2,000 acres of land rated as moderate for geothermal steam. The Iron Hat Mining District located on the northern boundary has been a past producer of silver, lead, copper, gold, antimony and tungsten.

Based on surrounding current and past metallic mineral exploration/development, short-term interest within the WSA is likely. This interest would result in the eventual development of a 300 acre (100 acres in WSA) open pit precious metal mine in the Iron Hat District. Precious metal exploration, consisting of cross-country travel, 2 miles of drill roads and pads, dozer trenches and open cuts disturbing five acres would occur in the Iron Hat District and 5 acres in Hoffman Canyon. Similar barite exploration disturbing five acres with a mile of drill road would occur in China Canyon.

Geothermal exploration has subsided compared to the past, however, proposed developments are increasing in the surrounding areas. This interest would result in geothermal exploration consisting of cross-country travel, drill sites and 1/2 mile of access roads disturbing five acres in the southeastern tip of the WSA. There are no existing leases.

In summary, quantities of various mineral and energy resources are unknown, but the potential for occurrence is from moderate to high throughout the WSA and the potential for geothermal steam is moderate for 20% of the area.

Impacts on Resources

The comparative impact table (Table 4) on the following pages summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)
Impacts on Wilderness Values	None of the 10,358 acres would receive long-term protection. Naturalness would be impaired on approximately 42% or 4,345 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on approximately 33% or 3,400 acres from increased ORV use, energy and mineral activity and vegetation manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetation manipulation. None of the special features - Lee and Hoffman Canyons and China Mountain - would receive long-term protection from ORV use and energy and mineral activity.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA except for 100 acres of valid discoveries near Lee Canyon. The special features would receive long-term protection except near Lee Canyon.	Area Recommended For Wilderness: Wilderness values would be preserved on 8,900 acres. The special features of Hoffman Canyon and part of Lee Canyon would receive long-term protection. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 84% or 1,225 acres due to ORV use and vegetative manipulation; no energy or mineral activity is anticipated. Solitude would be adversely impacted on approximately 50% or 726 acres from ORV use and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use and vegetative manipulation. No energy or mineral activity is anticipated. The special features - that portion of Lee Canyon associated with the valid discoveries - would not receive long-term protection.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal exploration and development of 1 large open pit precious metal mine would be possible.	The projected development of 1 large open pit precious metal mine would be possible due to valid discoveries on pre-designation mining claims. Additional base-precious metal exploration and development would be foregone.	The projected development of 1 large open pit precious metal mine would be possible in the area recommended for wilderness due to valid discoveries on pre-designation mining claims.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)
Impacts on the Level of Exploration for Geothermal Resources	Projected geothermal exploration would be allowed.	Geothermal exploration opportunities would be foregone.	No energy exploration or development is expected in the area recommended for wilderness. Projected geothermal exploration opportunities would be allowed in the area not recommended for wilderness.
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the current 40 visitor hours to 90 hours annually.	40 visitor hours of current ORV use and 90 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.	30 visitor hours of current ORV use and 70 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.

Local Social and Economic Considerations

Social and economic considerations were not considered to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980) many of the 26 comments discussed characteristics of the general area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunity for solitude. This WSA was split from the original NV-020-406 (Tobin Range) area and these comments were addressed to the 115,000 acres of the original Tobin Range area.

During the 90 day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the eight oral comments received, all of them supported more wilderness than the Proposed Action (No Wilderness). Of the 59 written comments received, eight supported the Proposed Action and 51 supported more wilderness. Some people wrote about the need to preserve the WSA's naturalness, scenic quality, wildlife habitat and fishery.

Pershing County wants to preserve all public lands within the county's boundary's as multiple use areas.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said "We agree that this area is not suitable for further consideration as a wilderness area. This area is small in size, has limited wilderness values and has mineral development potential." This letter was in response to the Draft Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions are placed on military flights. They said that they would work with the BLM if military flights create problems in some areas.

No comments have been received on the Winnemucca Final Wilderness Recommendations Environmental Impact Statement.

TOBIN RANGE WILDERNESS STUDY AREA

1. THE STUDY AREA - 13,107 acres

The Tobin Range WSA (NV-020-406Q) is located in eastern Pershing County, about 40 miles south of Winnemucca, Nevada. The WSA includes 13,107 acres of public lands and surrounds 120 acres of private lands (Table 1).

The WSA is bordered on the west by the Grass Valley Road and an unnamed road in Section 20 that leads to the Bushee Canyon Road. The Bushee Canyon Road forms part of the southern boundary as do section lines. The eastern boundary follows the crest of the mountain range and after it passes Mount Tobin, runs along section lines that separate it from private land. The north boundary incorporates part of the township lines between T.29N. and T.30N. before it meets another road that takes it back to the Grass Valley Road.

The Tobin Range WSA measures about 6 miles north-south and varies from 2 to 5 miles east-west. It rises from the edge of the valley floor to the crest of the Tobin Range, with elevations ranging from 4,640 feet to 9,775 feet. Within the WSA are three distinct landforms: the high elevation adjacent to Mt. Tobin, the lower foothills within the Tobin Range, and the fringing desert piedmont.

The upper elevations (7,000 - 9,700 feet) are characterized by smooth, dominant ridges separated by shallow drainages. The foothill section has roughly parallel (east-west) deeply-cut drainages and several dominant rock outcrops and is bounded on the west by a prominent fault scarp 10 to 20 feet high, formed in 1915. This fault was exposed during a major earthquake. The lowest section, the fringing desert piedmont, is a gently sloping alluvial fan on the east side of Pleasant Valley, with several parallel, east-west drainages separated by low ridges.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September 1987. There were two alternatives analyzed in the EIS: an all wilderness alternative and a no wilderness alternative, which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness
13,107 acres recommended for nonwilderness

The recommendation for this WSA is to release all 13,107 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

For this WSA, management emphasizing access to potential mineral resources was selected over management as designated wilderness due to energy and mineral resource potential. Pre-FLPMA (1976) mining claims and geothermal leases encompass approximately 43 percent of the area. It is not possible to exclude the areas containing mining claims (500 acres) without seriously impairing wilderness manageability. In addition, the area(s) of the WSA which contains the highest mineral potential generally correspond to the area(s) with the highest wilderness values (3,600 acres). If these claims are developed, and it is very probable that they will be, the areas with some of the highest wilderness values would lose those values.

It is projected that short-term metallic mineral interest within the WSA is likely. This interest would result in tungsten, mercury and barite exploration consisting of cross-country travel, one mile of drill roads, and dozer trenches and cuts disturbing five acres. It is also projected that a 10 acre gravel pit with 1/2 mile of access road would also be developed. Although geothermal exploration has decreased, proposed developments are increasing in the surrounding area. Exploration would consist of cross-country travel, small drill sites and an access road disturbing approximately 5 acres. Oil and gas exploration is expected to continue at the present level. This exploration would involve cross country travel, a well pad and 1/2 mile of access road for a total disturbance of 15 acres.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	13,107
Split Estate (BLM surface only)	0
Inholdings (State, private)	120
Total	13,227
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended for Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended for Wilderness	
BLM	13,107
Split Estate	0
Total BLM Lands Not Recommended for Wilderness	13,107
Inholdings (State, Private)	120

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

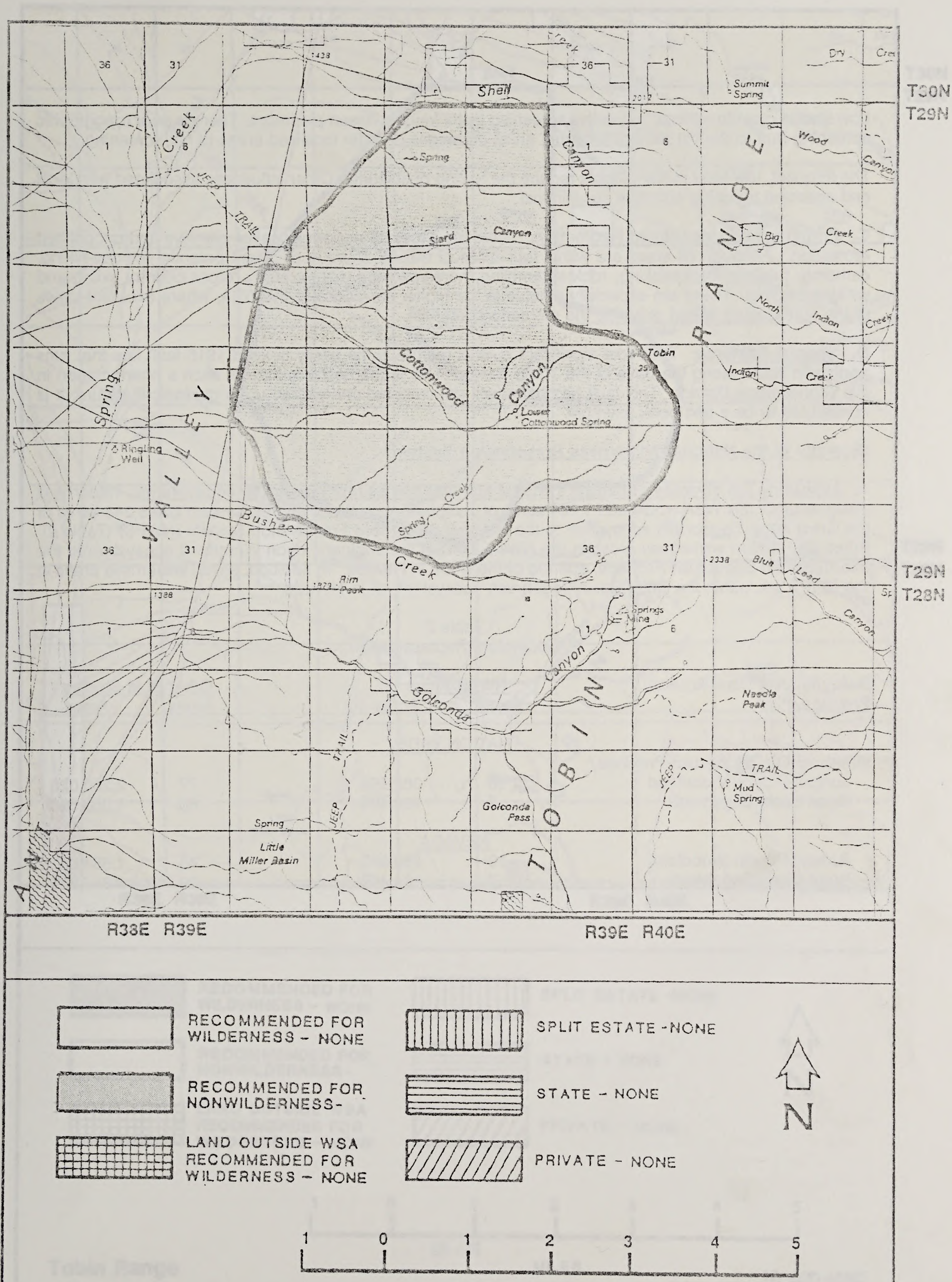
Wilderness Characteristics

A. Naturalness: The Tobin Range is primarily natural, with most of the WSA's high country having virtually no development. The upper elevations (7,000 - 9,700 feet) are characterized by smooth, dominant ridges separated by shallow drainages. The foothill section has roughly parallel (east-west) deeply-cut drainages and several dominant rock outcrops and is bounded on the west by a prominent fault scarp 10 to 20 feet high, formed in 1915. The lowest section, the fringing desert piedmont, is a gently sloping alluvial fan on the east side of Pleasant Valley, with several parallel, east-west drainages separated by low ridges.

Two fences (totalling 1.25 miles) and one developed spring are the only range developments in the WSA's one grazing allotment. Other human imprints within the WSA are the six ways totalling 7.8 miles, one abandoned mining prospect in the center of the WSA in Cottonwood Canyon, one abandoned utility line parallel to the west boundary and one gravel pit adjacent to the west boundary road. Two ranches, outside but adjacent to the WSA, are visible from within the unit, as are a county road and several other roads.

B. Solitude: The Tobin Range WSA offers outstanding opportunities for solitude, as a whole. Topographic screening in the high elevation section of the WSA ranges from fair to poor, except in major drainages where it is good. Shrubs provide minimal vegetative screening.

In the lower elevations of the Tobin Range, juniper trees and small riparian areas offer good to excellent vegetative screening. Topographic screening is also excellent because of the deeply cut drainages throughout the area.



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Low shrubs provide minimal vegetative screening in the fringing desert piedmont. There is poor topographic screening due to the flat terrain, however, small drainages do offer localized areas of fair screening.

The frequent, low-level military flights reduce the feeling of solitude. Other influences associated with local and seasonal ranching activities are minimal.

C. Primitive and Unconfined Recreation: There are excellent opportunities for primitive and unconfined recreation. Although all areas are within four miles of a road, there is excellent potential for day-hiking, camping, hunting, backpacking, rock scrambling, horse-packing, nature study, cross-country skiing and winter camping. These are especially notable in the higher elevations of the WSA, where excellent views of the surrounding desert enhance the recreation potential.

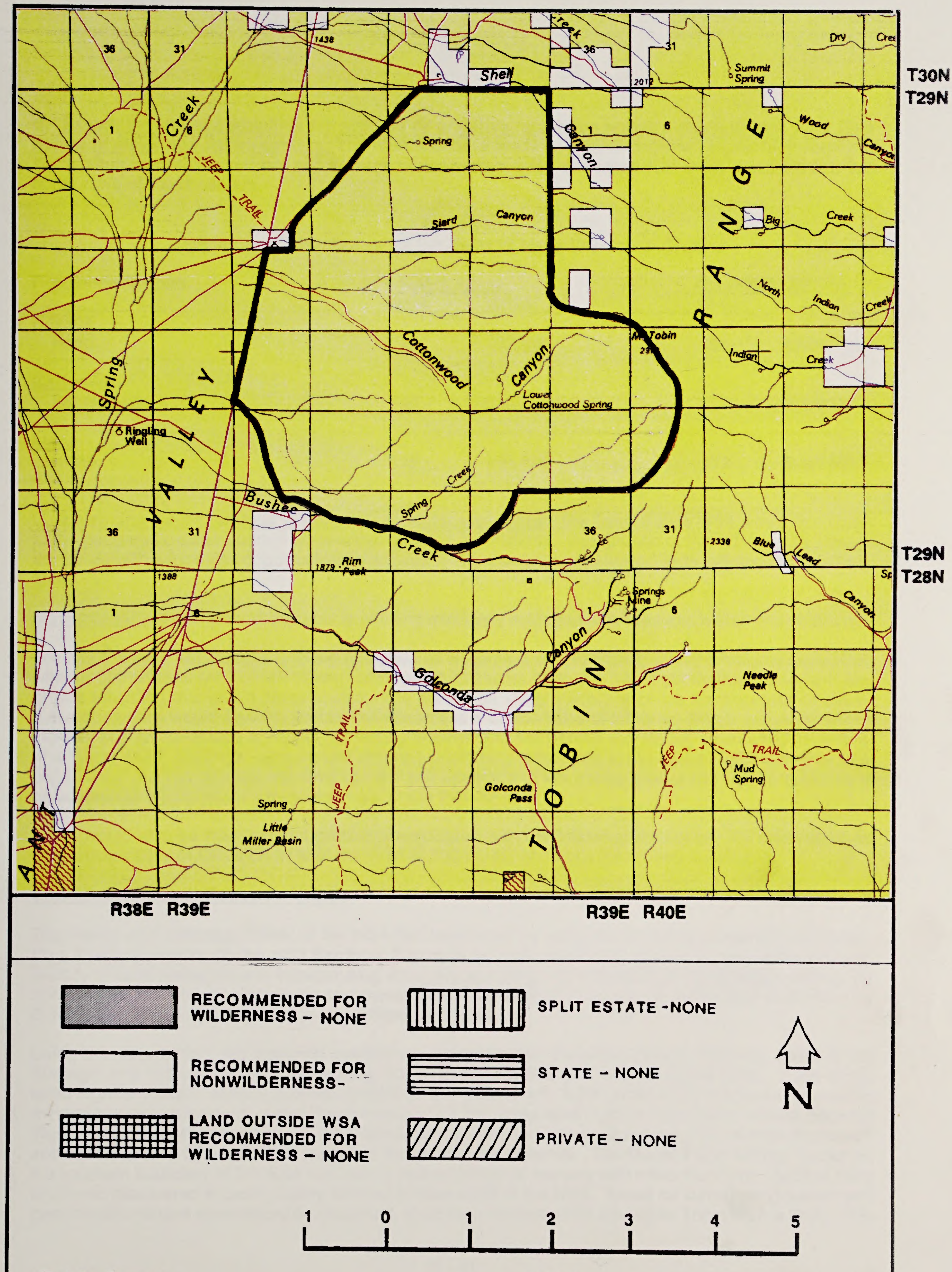
D. Special Features: The most significant special feature is the easily noticed 1915 fault line that runs north and south along the base of the Tobin Range. This is the best example of such a phenomenon in the Winnemucca District. This fault has been well documented and written up in geologic literature; it is considered to be a text book example.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 7,864 acres of Juniper-Pinyon Woodland ecosystem and 5,243 acres of the Great Basin Sagebrush ecosystem to the National Wilderness Preservation System (NWPS) (Table 2). Presently, sixteen wilderness areas in the NWPS contain the Juniper-Pinyon Woodland ecosystem in the Intermountain Sagebrush Province, and ten of these are in Nevada. In addition, seven wilderness areas in the NWPS are within the Great Basin Sagebrush ecosystem, all in Nevada.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification	NWPS Areas		Other BLM Studies	
Province/PNV	Areas	Acres	Areas	Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Juniper-Pinyon Woodland	16	362,556	77	2,250,026
Great Basin Sagebrush	7	104,407	60	1,088,540
	NEVADA			
Juniper-Pinyon Woodland	10	268,900	45	1,654,628
Great Basin Sagebrush	7	104,407	38	847,326



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B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of three major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Sacramento	48	5,038,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039

C. Balancing the geographic distribution of wilderness areas: The Tobin Range WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is not capable of being managed as wilderness due to manageability problems associated with the 500 acres of pre-FLPMA mining claims and 5,125 acres (39% of WSA) of geothermal leases and one private inholding that is 120 acres in size. The audio and visual intrusions of the development of any of these operations would severely reduce the wilderness characteristics of the area. These intrusions would include, but not be limited to, noise caused by engines and the normal day to day operation of a mining enterprise. Dust, buildings, vehicles and diggings would be obvious and would detract from the wilderness experience. Access to allow the development and operation of the mining claims and leases would have to be granted which would incorporate new roads into the area.

There would also be management problems associated with the following concerns: 7.8 miles of ways, easy accessibility of ORVs on 31% of the WSA (4,000 acres) and frequent military overflights.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

Using this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 2,200 acres rated high for metallic mineral potential (mercury* and antimony*), 5,200 acres rated moderate for metallic mineral potential (tungsten*, copper* and mercury*), 3,700 acres rated high for nonmetallic mineral potential (fluorspar*, barite, sand and gravel), 9,400 acres rated moderate for nonmetallic mineral potential (fluorspar* and barite) and 5,100 acres rated moderate for geothermal potential. The Mount Tobin Mining District on the southern boundary of the WSA has been a past producer of mercury with minor fluorspar. Zeolites have also been discovered in Jersey Valley, located 6 miles south of the WSA. Based on surrounding current and past metallic mineral exploration/development, short term interest within the Mount Tobin WSA is likely. This interest would result in tungsten, mercury and barite exploration, consisting of cross-country travel, one mile of drill roads and pads, dozer trenches and open cuts disturbing five acres in the center of the study area and five acres in the southern portion.

As reserves in existing county gravel pits are depleted an additional 10-acre county pit and associated 1/2-mile access road would likely be developed on the west side of the WSA.

Geothermal exploration has subsided compared to the past, however, proposed developments are increasing in the surrounding areas. This interest would result in geothermal exploration consisting of cross-country travel, small drill sites and 1/2 mile of access roads disturbing five acres along the west side of the WSA.

Oil and gas exploration activities are expected to continue at the current level. This interest would result in further oil and gas geophysical exploration consisting of cross country travel, disturbing five acres along the west side of the WSA. One well pad and 1/2 mile of access road, disturbing 10 acres, would also be on the west side of the study area. Oil and gas drilling activities would have to occur on new leases as none exist at present. Geophysical exploration activities would occur with or without any leases.

There are 500 acres of pre-FLPMA mining claims and 5,125 acres of oil and gas leases in the WSA. There is no present production of any mineral or geothermal resources on the study area.

In summary, quantities of various mineral and energy resources are unknown, but the potential for occurrence is from moderate to high in several portions of the WSA.

Impacts on Resources

The comparative impact table (Table 4) below summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness
Impacts on Wilderness Values	None of the 13,107 acres would receive long term protection.	The wilderness values of naturalness, solitude and primitive recreation would be preserved throughout the WSA.
-Naturalness	Naturalness would be impaired on approximately 19% or 2,540 acres as a result of increases ORV use and surface disturbance from energy and mineral activity.	
-Solitude	Solitude would be adversely impacted on approximately 5% or 680 acres from increased ORV use and energy and mineral activity.	
-Primitive Recreation	Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity.	
-Special Features	The special features - Mt. Tobin and Siard Canyon - would not receive long-term protection.	The special features - Mt. Tobin and Siard Canyon - would receive long-term protection.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base metal, nonmetallic mineral exploration and development of 1 small gravel pit would be possible.	Base metal, nonmetallic mineral exploration and development of 1 small gravel pit would be foregone.
Impacts on Energy Developments	Projected geothermal and oil and gas exploration opportunities would be possible.	Geothermal and oil and gas exploration and development opportunities would be foregone.
Impacts on Recreational Off-Road Vehicle Use	ORV use would grow from the present 40 visitor hours to 90 hours annually.	40 visitor hours of current ORV use and 90 hours of foreseeable future use would be displaced annually.

Local Social and Economic Considerations

Social and economic considerations were not considered to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980) many of the 26 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: opportunities for solitude, spectacular scenery, naturalness and its special features. Reasons given for opposing wilderness study area status were the following: other resource values, roads, intrusions and lack of outstanding opportunities for solitude. These comments addressed the entire 115,000 acres of the original study area (Tobin Range, 406).

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public hearings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). No oral comments were received that named only the Tobin Range WSA. A total of 11 written comments were received. Five of the comments supported more wilderness than was recommended in the draft wilderness EIS (DEIS). Six of the comments supported the preferred alternative in the DEIS (no wilderness). Most of these comments noted the WSA's potential mineral resources and the low wilderness quality.

Pershing County wants to preserve all public lands within the county's boundaries as multiple use areas.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We concur that the Tobin Range is not a desirable wilderness area. It has high mineral values and manageability problems in addition to a rather low wilderness quality." This letter was in response to the DEIS.

The U.S. Air Force said it supported wilderness designation provided no restrictions were placed on military flights. It will work with the BLM if military flights create problems in some areas.

No comments were received on the Final EIS.

BLUE LAKES WILDERNESS STUDY AREA

1. THE STUDY AREA - 20,508 acres

The Blue Lakes WSA (NV-020-600) is located in northwest Nevada in Humboldt County. The WSA includes 20,508 acres of public lands and surrounds 40 acres of private land (Table 1).

The boundary starts at the point known as the Blue Lakes Threshold. It proceeds west on this road until it meets the road known as the Cow Trail. The boundary then goes northeast on the Cow Trail until it meets the Adams Mine Road. It then proceeds past the mine until a point one-quarter mile north of Big Creek which is on private land. The boundary skirts around the private land (to the west for two miles, then to the south for a mile, then to the west again for another mile and then in a generally south direction for 3 miles) until it comes to the south section line of Section 30. At this point, the boundary proceeds west for 2 1/2 miles along the section line until it hits the southwest corner of Section 26. The border then heads south for one mile to the southeast corner of Section 34 where it continues west for approximately one and a quarter miles. At this point, the border hits the Hollywood Meadow - Big Onion Reservoir Road and proceeds north on it, jockeying around one small parcel of private land, until it reaches the last ridge overlooking the reservoir. The border continues on the road from here until it reaches the 7,200 foot contour level and follows this around until it reaches the Blue Lakes Threshold Road and follows that road east to the Threshold, the starting point.

The Blue Lakes WSA lies in a mountainous north-south trending range (the Pine Forest Range) with subalpine and sagebrush steppe ecosystems and extensive riparian zones. Blue Lakes were formed by a moraine-dammed stream, made after a mountain glacier melted and left a large depression (a cirque) which was then filled by springs from the surrounding hillside. This type of geologic formation is very rare in the Great Basin and especially in northwestern Nevada. Other evidences of glaciation, such as polished rock, moraines, glacial canyons and striation, are also present in the area.

The topography is generally steep with slopes averaging 60 percent. The backbone of the Pine Forest Range is a north-south trending line. Valleys originate near the range summit and vary from broad meadows to steep draws. Blue Lakes, a heavily used fishery, is stocked by the Nevada Department of Wildlife since there are not enough nutrients to support a large, viable population. There is a disjunct population (i.e., separated from the main populations, which can lead to genetic variation) of limber and whitebark pine trees in portions of the higher elevations.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 16,400 acres would be designated as wilderness and 4,108 acres would be released for uses other than wilderness, which is the recommendation of this report, and a no wilderness alternative.

2. RECOMMENDATION AND RATIONALE - 16,400 acres recommended for wilderness
4,108 acres recommended for nonwilderness

The recommendation for this WSA is to designate 16,400 acres as wilderness and to release 4,108 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The recommended area includes (1) a substantially natural area with minimal range improvements and abandoned ways, (2) outstanding opportunities for primitive recreation, including day hiking, backpacking, camping, hunting, fishing, horse packing, rock climbing, nature study and water sports; (3) outstanding opportunities for solitude provided by excellent topographic and vegetative screening and the area's size and configuration, (4) significant features including subalpine glacial lakes, granitic rock outcrops, an isolated population of whitebark and limber pine, diverse wildlife species, extensive riparian zones and (5) a highly scenic landscape.

According to the BLM's Wilderness Environmental Impact Statement for the Winnemucca District, quantities of various minerals are unknown, but the potential for occurrence is moderate in approximately one-third of the WSA. There is no potential for oil and gas and geothermal resources.

The U.S. Geological Survey Mineral Report states that although mineral resources were identified within the recommended portion of the WSA, there is low potential for undiscovered gold and silver resources and associated minerals (antimony, copper, lead, mercury, molybdenum, zinc and uranium) throughout the study area. A low potential exists for undiscovered tungsten in three small areas in the northern portion of the WSA.

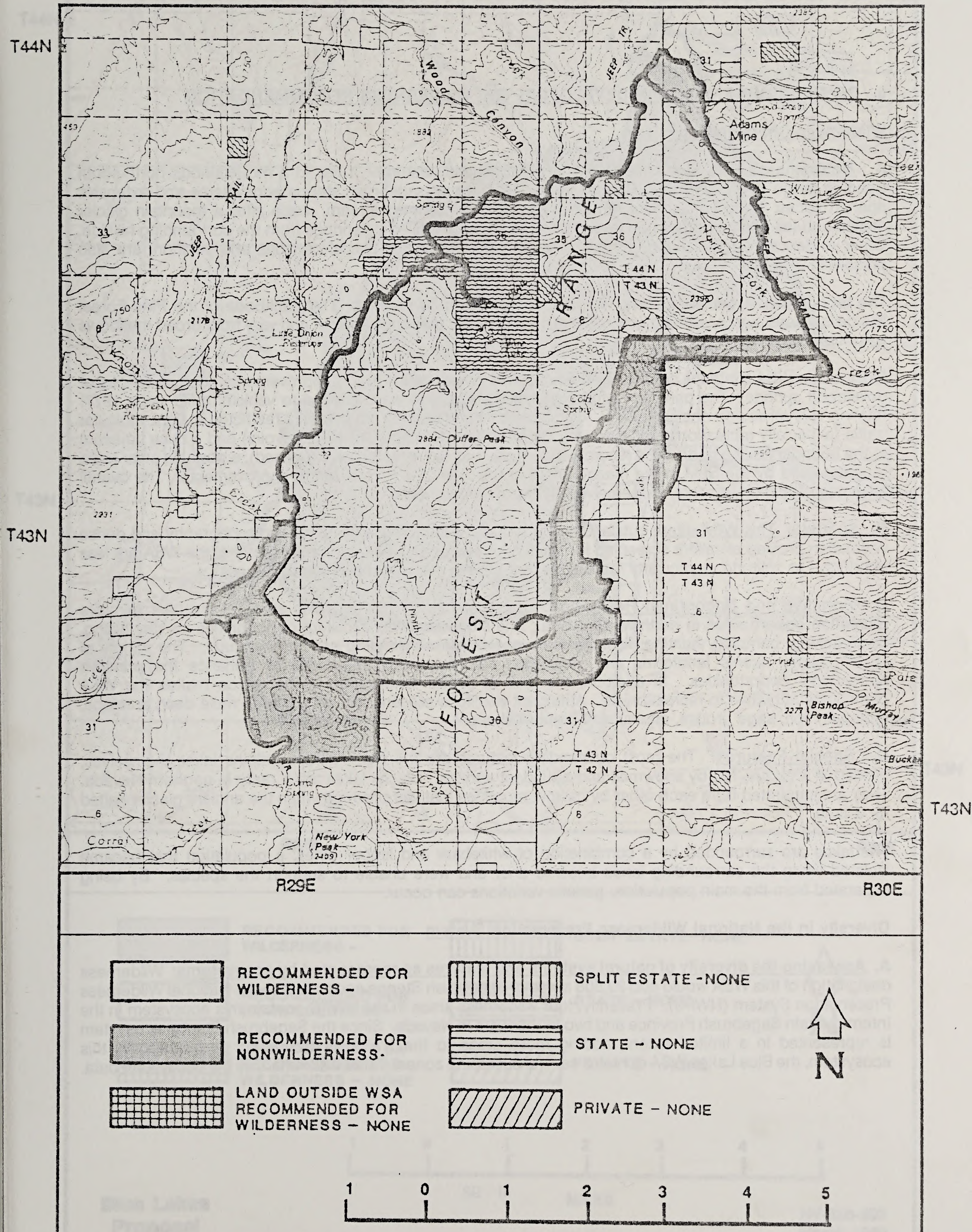
In addition, the majority of the recommended area was previously designated as closed to vehicles by the BLM and a portion (2,900 acres) has been withdrawn from mineral entry. Wilderness designation would provide more comprehensive management guidance for protecting the area's natural values than do these designations.

Those portions that are recommended for nonwilderness are on the periphery of the WSA. They were deleted to create a more identifiable boundary and to reduce conflicts with mining claims and private lands. One area is accessible to ORVs and is adjacent to a mining area which detracts greatly from naturalness. The other area is adjacent to large blocks of private land.

It is projected that a total of 10 acres would be impacted in the portion recommended for nonwilderness by metallic mineral exploration/development.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	20,508
Split Estate (BLM surface only)	0
Inholdings (State, Private)	40
Total	20,548
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	16,400
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	16,400
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	4,108
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	4,108
Inholdings (State, Private)	40



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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The Blue Lakes WSA is predominantly natural. It lies in a mountainous north-south trending range (the Pine Forest Range) with subalpine and sagebrush steppe ecosystems and extensive riparian zones. Blue Lakes were formed by a moraine-dammed stream, made after a mountain glacier melted and left a large depression (a cirque) which was then filled by springs from the surrounding hillside. Other evidences of glaciation, such as polished rock, moraines, glacial canyons and striation, are also present in the area.

The topography is generally steep with slopes averaging 60 percent. The backbone of the Pine Forest Range is a north-south trending line. Valleys originate near the range summit and vary from broad meadows to steep draws.

Most of the WSA's interior contains few developments except for range improvements such as fences or developed springs. The periphery of the WSA has six vehicle ways (closed to vehicle traffic since 1977) totaling 10.8 miles and one line shack. Outside sights and sounds are primarily restricted to light vehicular traffic (especially recreational traffic around Onion Valley and Little Onion Reservoirs) and a mine adjacent to the boundary in the north. The recommended area has 9.6 miles of ways (unused), a portable solar radio repeater used by the BLM in the management of the area and several range improvements. The overall influence of human imprints, as perceived by the visitor, is negligible.

B. Solitude: This WSA offers outstanding opportunities for solitude. The rugged topography and dense vegetation provide excellent screening for visitors. A few open areas on the periphery of the WSA are less conducive to solitude, particularly in portions that are not recommended for wilderness.

C. Primitive and Unconfined Recreation: The Blue Lakes WSA provides some of the best primitive recreation opportunities in northwest Nevada. The study area has excellent opportunities for day hiking, backpacking, camping, hunting, fishing, horse packing, rock climbing and nature study. The variety of terrain, highly scenic landforms and vegetation and numerous attractions all enhance the primitive recreational opportunities. In addition, the lack of similar landscapes in the region makes the WSA particularly attractive to recreationists. Abundant wildlife is present, including trophy mule deer, antelope, mountain lion, sage grouse, chukar and bighorn sheep.

D. Special Features: The most outstanding features are the clear, cold subalpine lakes themselves, nestled in a cirque, fed by snowmelt and abundant springs. Glacial lakes are a rarity in northern Nevada. They are separated from each other by narrow moraines that were formed when the ancient glacier halted for a time.

The lakes are surrounded by a combination of whitebark and limber pines, a population that became isolated when the surrounding lands became drier and were unable to support the species. By being separated from the main population, genetic variations can occur.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 20,508 acres of Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS contain this ecosystem in the Intermountain Sagebrush Province and two of them are in Nevada. Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the NWPS is desirable. In addition to this ecosystem, the Blue Lakes WSA contains several subalpine zones. Table 2 summarizes the ecosystem data.

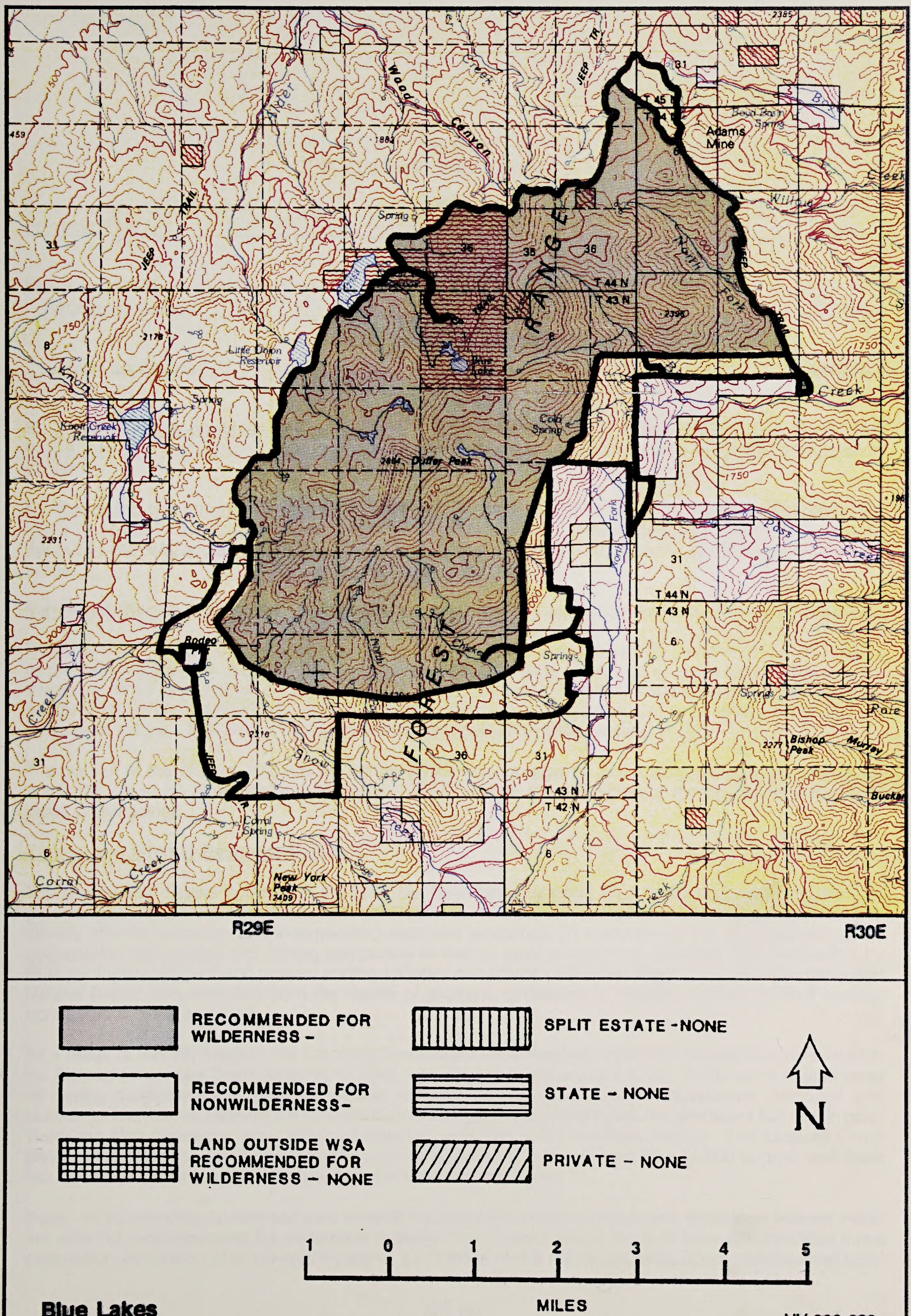

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Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	2	86,907	33	1,469,316

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is not within five hours driving time of any major population center.

C. Balancing the geographic distribution of wilderness areas: The Blue Lakes WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The portion of the WSA recommended for wilderness designation can reasonably be managed as wilderness to preserve values now present in the area. There are no private inholdings or split estate lands; nor are there any oil or gas or geothermal leases. There are 380 acres of mining claims located at the extreme southern tip and it is considered unlikely that these claims would be developed to an extent detrimental to wilderness values. The area is presently being managed as an ORV closure.

The portion of the WSA recommended for nonwilderness can also be reasonably managed as wilderness but there would be manageability concerns. These include the 460 acres of mining claims and the 40 acres of inholdings.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) past and present mining activities and (7) the USGS/BM Mineral Report. The USGS/BM Mineral Report was compiled from the results of geologic, geochemical, geophysical and mineral surveys conducted in 1984 and 1985.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic materials Stockpiling Act of 1946, with change in subsequent Acts): 8,100 acres of land rated as having moderately favorable for metallic mineral potential (gold, silver, molybdenum, mercury* and uranium). The Adams Mine on the northeast boundary (just outside the WSA) has produced $27,000 in gold. There are also numerous other minor prospecting activities in the northern portion. The Leonard Creek Mining District on the south-east boundary of the WSA has produced more than $5,000 in gold, and there has been prospecting activity for uranium, molybdenum and gold.

Based on surrounding current and past metallic mineral exploration/development, short-term interest within the area not recommended for wilderness is likely. This interest would result in base and precious metal exploration, consisting of cross-country travel, 1 1/2 miles of drill roads and pads, dozer trenches and open cuts, disturbing 5 acres in the northern tip of the WSA and 5 acres along the southern edge. This would occur outside the road closure area.

The USGS/BM report (Bulletin 1726-D), stated that although no resources were identified within the suitable portion of the WSA, there is low potential for undiscovered gold and silver resources and its associated minerals (antimony, copper, lead, mercury, molybdenum, zinc and uranium) throughout the study area. A low potential exists for undiscovered tungsten resources in three small areas in the northern part of the study area.

There are 840 acres of mining claims and no leases in the WSA.

In summary, quantities of various minerals are unknown, but the potential for occurrence is moderate in approximately one-third of the WSA as identified in the Environmental Impact Statement.

Impacts on Resources

The comparative impact table (Table 3) below summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 3
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	No Wilderness
Impacts on Wilderness Values	Area Recommended For Wilderness: Wilderness values would be preserved on 16,400 acres. The special features - Blue Lakes, Duffer Peak, and pine and aspen stands - are located within this portion. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 10 acres or less than 1%. Impairment would come from ORV use and mineral activity occurring outside the closure and withdrawal. Solitude would be adversely impacted in approximately 4% or 170 acres from ORV use and mineral activity outside the closure and withdrawal. Opportunities for primitive recreation would be decreased due to increased ORV use and mineral activity outside the closure and withdrawal.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA. The special features - Blue Lakes, Duffer Peak and pine and aspen stands - would receive long-term protection.	Naturalness would be impaired on less than 1% of the WSA as all but 2,700 acres are within the vehicle closure. Mineral activity could impair approximately 20 acres of the area not within the withdrawal. Solitude would be adversely impacted on less than 1% or 170 acres from ORV use and mineral activity outside the closure and withdrawal. Opportunities for primitive recreation would be decreased on those portions outside the closure and withdrawal due to increases ORV use and mineral activity. The special features - Blue Lakes, Duffer Peak and pine and aspen stands - are within the closure and withdrawal, therefore, this alternative would not affect the special features.

Table 3 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	No Wilderness
Impacts on Exploration for and Development of Non-Energy Mineral Resources	No base-precious metal exploration is allowed in that portion of the WSA recommended for wilderness as the current vehicular closure precludes such opportunities. Projected base-precious metal exploration would be possible in that area not recommended for wilderness which lies outside the existing vehicle closure.	Base-precious metal exploration and development would be foregone within the designated wilderness.	Projected base-precious metal exploration outside the existing vehicular closure would be possible.
Impacts on the Level of Exploration for Energy Resources	No energy resources have been identified nor is any exploration or development anticipated in either the recommended wilderness or nonwilderness areas.	Same as Proposed Action.	Same as Proposed Action.
Impacts on Motorized Recreational Vehicle Use	There would be no change in the area recommended for wilderness. There is no current ORV use and none would be allowed in the future. In the area not recommended for wilderness, ORV use would grow from the current 40 visitor hours to 80 hours annually.	Same as Proposed Action.	Same as Proposed Action.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 19 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were these: opportunities for solitude, spectacular scenery, the naturalness and special features. Reasons given for opposing wilderness study area status were the following: other resource values, roads, intrusions, and lack of outstanding opportunities for solitude. These comments addressed the entire 51,200 acres of the original study area. About 30,000 acres have since been released from wilderness consideration.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Nine oral comments were received as well as 67 written comments. Eight of the oral comments supported the Proposed Action (16,400 acres designated as wilderness) and one person supported less wilderness than that proposed in the draft EIS. Of the 67 written comments, 61 people supported the proposed action, while one person wanted more wilderness and five people wanted less than that proposed in the draft EIS.

Most of the comments were about the unique glacial lake scenery, the need to protect the fragile ecosystem and the aspen and pine stands and the opportunities for recreation. Other people suggested a smaller area because of potential mineral resources and asserted that the WSA has a lot of human imprints, lacks opportunities for solitude and that access for hunters is needed.

No comments about wilderness were received from Humboldt County agencies or officials during this time period. However, the county's land use plan addresses wilderness designation specifically under Goal 5: "To prevent commonly used areas of Humboldt County from being erroneously designated as "wilderness" or roadless areas. In addition, Goal 6 states, "To maintain the existing roads and access necessary to the economic well being of Humboldt County including the agriculture, livestock, mining and tourist industries as well as to maintain the quality of life in Humboldt County by ensuring access to recreational lands of all kinds including fishing, wildlife, rock-hounding, sight-seeing, off road vehicle use, horseback and back packing use and general enjoyment of the (sic) Nevada's traditional wide open spaces.

Because the terms "commonly used areas" and "erroneously designated as wilderness" are not defined, it is difficult to determine whether wilderness designation is consistent or inconsistent with Goal 5. Wilderness designation could be both consistent and inconsistent with Goal 6 since wilderness designation would ensure public access for most recreational activities mentioned but close areas to off-road vehicle use.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "This area is one of the most controversial of those considered in this District. It is also possibly the most beautiful, with its alpine forests and lakes. We sympathize with local people who have been angered by your closure of the all-vehicle road to Blue Lakes several years ago, since the area was developed primarily by local people for general recreational use and did enjoy heavy use prior to the road closure. We note that the county has now accepted the road closure as being necessary to protect the fragile alpine lake environment, and is not opposed to wilderness designation for the area. We therefore concur with the Bureau's preferred alternative , recommending partial designation of the Blue Lakes area. However, we urge the BLM to involve local people in the development of a management plan for the area." This letter was in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions were placed on military flights. It said it would work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

ALDER CREEK WILDERNESS STUDY AREA

1. THE STUDY AREA - 5,142 acres

The Alder Creek WSA (NV-020-600D) is located in northwest Nevada in Humboldt County, about a 6 hour drive northeast of Reno. The WSA includes 5,142 acres of public lands. (See Table 1).

The WSA is bordered on the northeast by the Big Onion-Alder Creek Road which leads into the Little Onion Reservoir Road. The border then skirts around the west side of Little Onion Reservoir and, after skirting a parcel of private land, continues south to the Rodeo Flat-Knott Creek Reservoir Connecting Road, which is the southern boundary of the WSA. The boundary continues to the South Knott Creek Reservoir Road where it proceeds north to the vicinity of Knott Creek Reservoir. At this point it again skirts some private land adjoining Knott Creek Reservoir until it reaches the Knott Creek Reservoir-Alder Creek Road. The perimeter then follows this road to the north, being the northwestern boundary of the WSA, until it reaches the Alder Creek Big-Onion Road once more.

The Alder Creek WSA lies on the west flank of a mountainous north-south trending range with a predominantly sagebrush steppe ecosystem mixed with a smaller amount of subalpine and riparian zones. The landform is steep to rolling with many granitic rock outcrops scattered throughout and contains coniferous stands in the higher elevations. Elevations range from 5,600 feet to 7,900 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were two alternatives analyzed in the EIS: an all wilderness alternative and a no wilderness alternative, which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness
5,142 acres recommended for nonwilderness

The recommendation for this WSA is to release all 5,142 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation for this WSA would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts. The Draft EIS Proposed Action differed from the present recommendation in that 4,000 acres were preliminarily recommended for wilderness. It was felt, however, that the loss of wilderness values associated with the development of adjacent private land, coupled with the relatively small size of the area, did not make this WSA a good candidate for wilderness management.

Although the Alder Creek WSA has a natural landscape with good scenery, its small size (5,142 acres) and configuration restrict the space usable for primitive and unconfined recreation. The landscape is extremely open and visibility is often very extensive which is detrimental to some recreation opportunities and values. In addition, the size is inadequate to lessen the impacts of offsite influences on solitude. The boundary roads lead people to Onion Valley, Little Onion and Knott Creek Reservoirs, the most popular recreation areas in the Winnemucca District. The recommendation recognizes that while the area has high recreation values and potential, its size would make it difficult, if not impossible, to manage wilderness values over the long term.

The small size and the influences on wilderness values by numerous diverse activities in the area contribute to a lack of potential to effectively manage the area as wilderness.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	5,142
Split Estate (BLM surface only)	0
Inholdings (State, Private)	0
Total	0
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	5,142
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	5,142
Inholdings (State, Private)	0

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

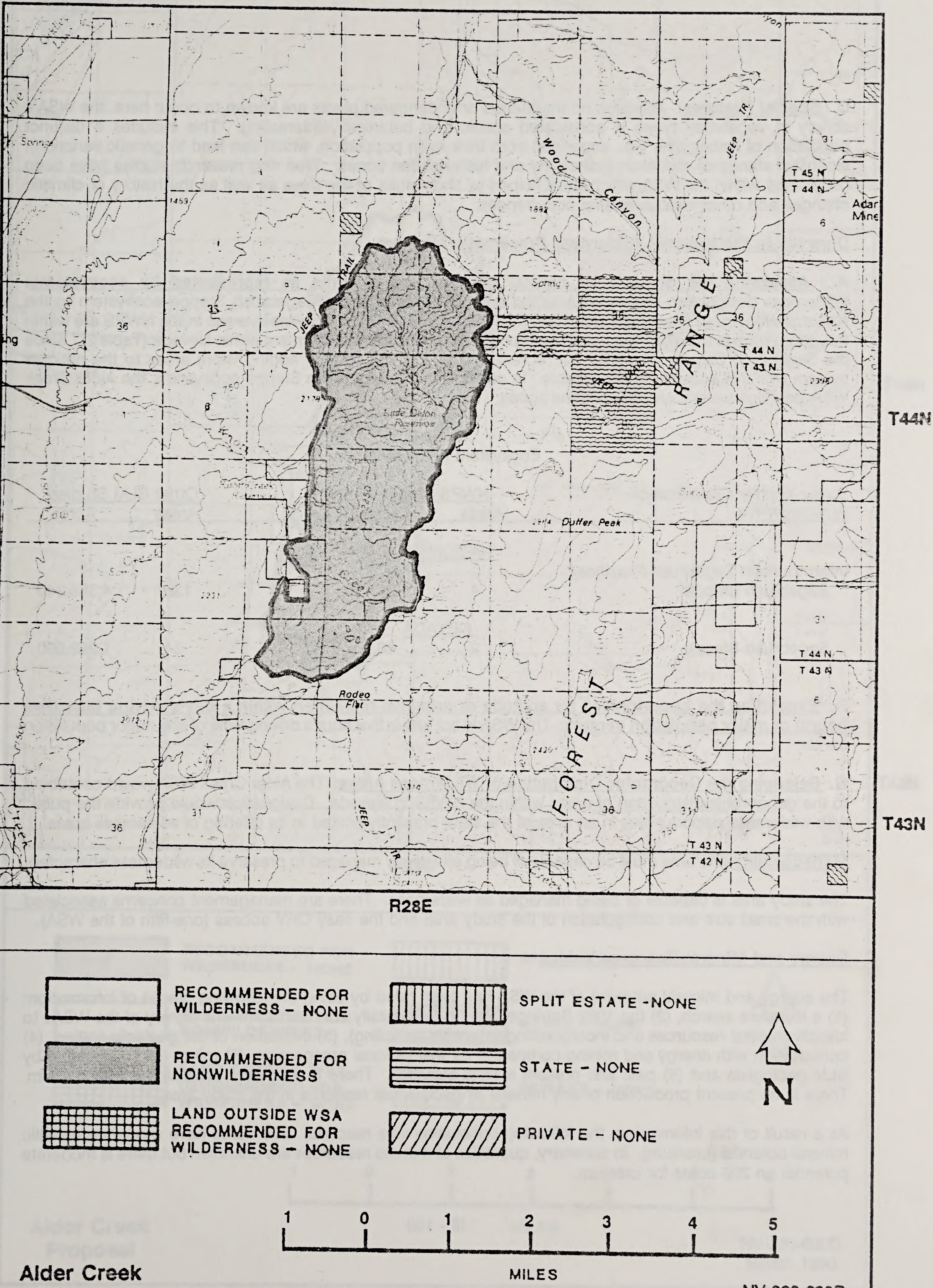
Wilderness Characteristics

A. Naturalness: The Alder Creek WSA is predominantly natural. It lies on the west flank of a mountainous north-south trending range with a predominantly sagebrush steppe ecosystem mixed with subalpine and riparian zones and with coniferous stands in the higher elevations. The landform is steep to rolling with many granitic rock outcrops scattered throughout. Elevations range from 5,600 feet to 7,900 feet.

There are only a few range improvements, roads and ways which are generally on the periphery of the WSA. The study area has approximately one mile of way and 1.4 miles of fence. Outside sights and sounds are presently restricted to light vehicular traffic and recreational use around Onion Valley (Big Onion), Little Onion and Knott Creek Reservoirs. The overall influence of human imprints within the WSA, as seen by the visitor, is negligible.

B. Solitude: The Alder Creek WSA presently offers outstanding opportunities for solitude in some areas. The rugged broken landform and (in spots) dense vegetation provide excellent screening for visitors. That portion of the WSA in the vicinity of Knott Creek Reservoir, however, is expected to have severe solitude problems caused by the number of people who recreate in the area. The boundary roads are heavily used by fishermen and, in the fall by hunters. The influences of outside sights and sounds were not analyzed in the Initial or Intensive Inventories.

C. Primitive and Unconfined Recreation: Alder Creek WSA, in conjunction with the adjacent Blue Lakes WSA, provides some of the best primitive recreation in northwest Nevada. The WSA has excellent opportunities for day-hiking, backpacking (in conjunction with the contiguous Blue Lakes WSA), hunting, fishing, horse-packing and nature study. The highly scenic landform, due to the varied vegetation, granitic landforms and abundant water, and numerous attractions all enhance the primitive recreation opportunities. For hunters, significant wildlife habitat is present,offering them opportunities to obtain trophy sized mule deer, sage grouse and mountain lions. The proximity to the Blue Lakes WSA and the lack of similar landscapes in the region makes the Alder Creek WSA particularly attractive to recreationists.



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D. Special Features: Although no threatened or endangered plants are known to occur here, the WSA's variety of vegetation types is considered scenic and botanically interesting. This includes a disjunct population of limber pine (i.e., separated from their main population, which can lead to genetic variation), extensive stands of mountain mahogany and lush riparian zones. Tree ring research studies have been conducted within the WSA which have helped to show ages of the trees as well as the history of climatic changes and other various natural occurrences.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 5,243 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently, four wilderness areas in the NWPS are within this ecosystem in the Intermountain Sagebrush Province and two of them are within Nevada (Table 2). Since the Sagebrush Steppe Ecosystem is represented in a limited extent, adding more areas to the national system with this ecosystem is desirable. In addition to the Sagebrush Steppe ecosystem, the Alder Creek WSA contains several small subalpine zones.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	2	86,907	34	1,252,990

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is not within five hour's driving time of any major population center.

C. Balancing the Geographic Distribution of Wilderness Areas: The Alder Creek WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

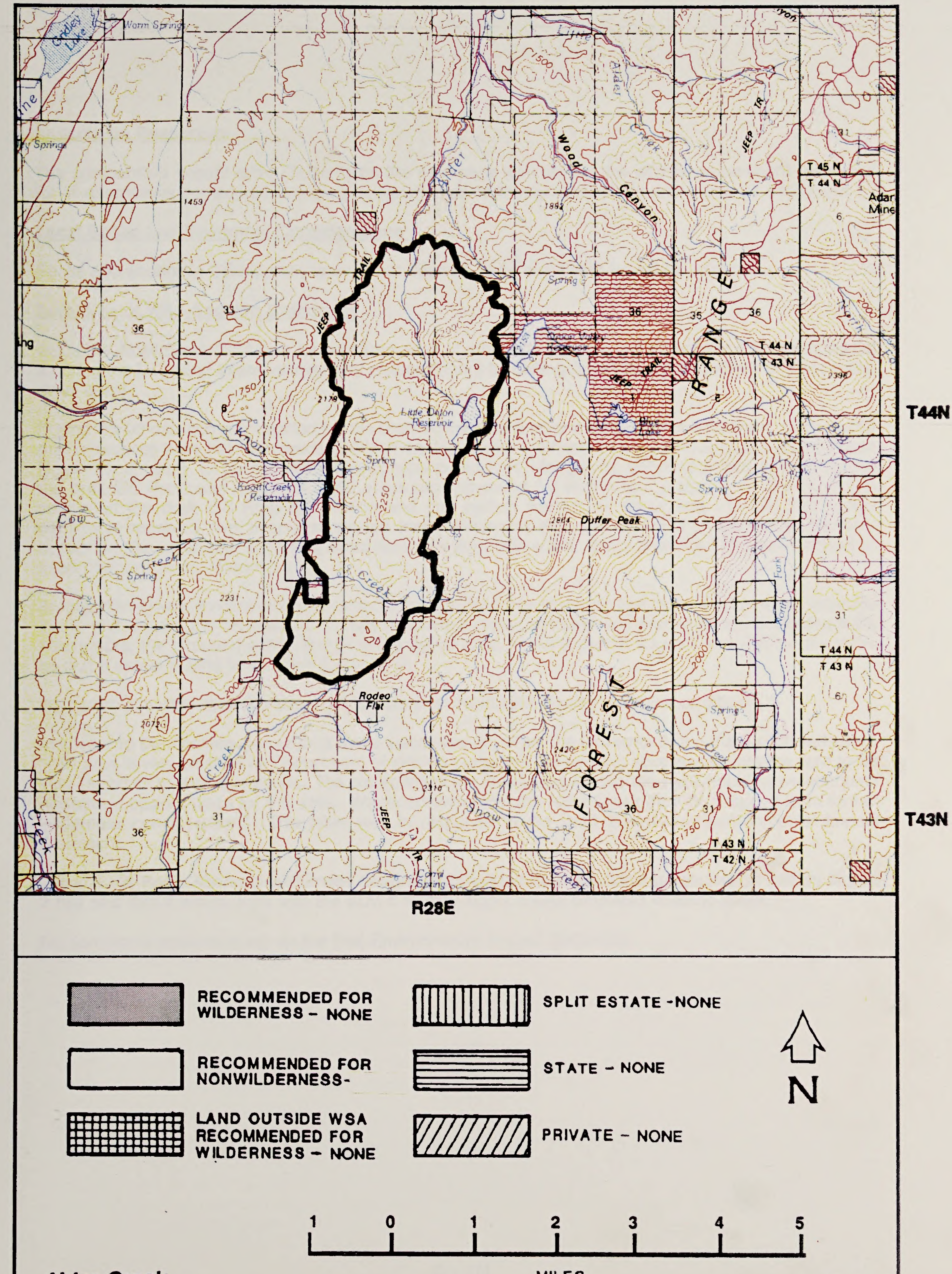
Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is capable of being managed as wilderness. There are management concerns associated with the small size and configuration of the study area and the easy ORV access (one-fifth of the WSA).

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities. There is a 20-acre pre-FLPMA mining claim. There is no present production of any mineral or geothermal resource in the study area.

As a result of this information, the following conclusion was reached: 200 acres have moderate metallic mineral potential (uranium). In summary, quantities of mineral resources are unknown but there is moderate potential on 200 acres for uranium.



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Impacts on Resources

The comparative impact table (Table 3) on the next page summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

Since the Alder Creek WSA was formed from parts of other study areas, any comments made concerning it during the initial and intensive inventory phases cannot be distinguished from comments made regarding other areas.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public hearings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the seventeen oral comments received, nine people supported more wilderness than the draft EIS Proposed Action of 4,000 acres recommended for wilderness designation. Seven people supported the draft EIS Proposed Action and one person wanted no wilderness. Of the fifty written comments received, two people supported more wilderness than the draft EIS proposed action, forty supported the action and eight supported less than the 4,000 acres. Since then the Proposed Action has been changed to no wilderness.

Among the comments received were remarks that the WSA was too small and that there is mineral potential inside and around the boundaries. Others cited the scenery, the need to preserve from development the naturalness, the pine and aspen stands and a raptor area. Several people suggested enlarging the WSA, so that it would extend to the Blue Lakes WSA.

No comments were received about wilderness from Humboldt County agencies or officials.

In a letter to the Winnemucca District dated December 30, 1983, the Governor of the State of Nevada said, "This area is very small. The Department of Wildlife considers the existing accessways into the area to be very important to their operations. The protection of the Blue Lakes Area to the east should prove adequate wilderness opportunities for this area. We recommend that the Alder Creek area be dropped from further wilderness consideration." This letter was in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions are placed on military flights. It has said that it would work with the BLM if military flights create problems in some areas.

No comments were received on the final Environmental Impact Statement.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness
Impacts on Wilderness Values	None of the 5,142 acres would receive long-term protection.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA.
-Naturalness	Naturalness would be impaired on less than 10% of the WSA from light ORV use. No energy or mineral activity is anticipated.	
-Solitude	There would be a slight impairment in solitude due to ORV use, none from mineral or energy activity.	
-Primitive Recreation	Opportunities for primitive recreation could be impaired due to chance encounter with an ORV user.	
-Special Features	There are no special features in this WSA.	
Impacts on Exploration for and Development of Non-Energy Mineral Resources	No mineral exploration or development is expected.	Same as Proposed Action.
Impacts on Energy Developments	No energy resources have been identified nor is any exploration or development anticipated.	Same as Proposed Action.
Impacts on Recreational Off-Road Vehicle Use	ORV use would grow from the current 30 visitor hours to 70 hours annually.	30 visitor hours of current ORV use and 70 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.

SOUTH JACKSON MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 60,211 acres

The South Jackson Mountains WSA (NV-020-603) is located in northwest Nevada, in Humboldt County. The WSA includes 60,211 acres of public land and surrounds 80 acres of private land (Table 1).

The WSA is bounded on the west by the Jackson Creek Ranch Road with some jockeying around private land and a gravel pit. At the northwest corner of the WSA, the road encounters the Christiorsson Canyon Road. This road and the associated mining prospects are excluded from the WSA. The Jackson Creek Ranch Road and private land form the northern boundary of the unit. The Trout Creek Road intermixed with private lands forms most of the eastern boundary of the WSA. The boundary deviates from the Trout Creek Road by following the Big Boy Mine Road to the west, traversing around a mining area east of King Lear Peak and then returning to the Trout Creek Road by way of the Big Cedar Creek Road.

The southern boundary of the WSA is formed by the Bull Creek Ditch, the Bull Creek Ditch Road, the Red Butte Mine Road and private land. A section of mining intrusions along the Bull Creek Road east of Navajo Peak is excluded from the WSA. The Navajo Peak Road and a series of legal boundaries form the southwest portion of the WSA.

The South Jackson Mountains WSA is about 15 miles long north-south and between 2 and 11 miles wide east-west. The study area is elongated along a north-south axis, generally wider on the north than the south. It straddles a north-south trending mountain range with fringing alluvial areas on the west and east flanks. The central portion within the Jackson Mountain Range is a rugged, broken landscape with sagebrush and juniper and riparian areas in the major drainages. The fringing alluvial areas are flat to rolling, with sagebrush dominating except on the extreme west and southwest edges, where saltbush and greasewood are found. The elevation ranges from 3,900 to 8,923 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement finalized in September, 1987. There were four alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 20,094 acres would be designated as wilderness and 40,117 acres would be released for uses other than wilderness, a second partial alternative where 10,300 acres would be designated as wilderness and 49,911 acres would be released for uses other than wilderness, which is the recommendation in this report, and a no wilderness alternative.

2. RECOMMENDATION AND RATIONALE - 10,300 acres recommended for wilderness
49,911 acres recommended for nonwilderness

The recommendation for this WSA is to designate 10,300 acres as wilderness and to release 49,911 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts. The draft EIS Preferred Alternative differed from this recommendation in that 9,794 acres were dropped from wilderness consideration between the draft and final. Additional study of the potential mineral values and management conflicts warranted the dropping of the acreage involved.

The recommended area includes a substantially natural landscape nearly void of improvements or imprints of man, outstanding opportunities for primitive recreation, including day hiking, camping, backpacking, hunting, rock climbing, nature study and mountaineering. There are outstanding opportunities for solitude provided by excellent topographic screening and there is a highly scenic and rugged landscape. For this portion of the WSA, management to preserve wilderness values was selected over management for access to potential mineral resources.

The area recommended for uses other than wilderness is on the periphery of the WSA surrounding the area recommended for wilderness. For this area, continued access for development of potential minerals resources was considered appropriate. There are two mining districts surrounded by the area that is not recommended for wilderness. The presence of these districts greatly reduces naturalness and solitude. The remainder of the area not recommended has several ways and is generally accessible to off-road vehicles. Also, the numerous parcels of private lands, generally associated with ranching activities, that surround the nonwilderness portion greatly reduce the wilderness values.

According to the Final Wilderness Environmental Impact Statement for the Winnemucca District, the nonrecommended area has 11,400 acres rated as having high metallic mineral potential (gold, silver, lead, zinc, nickel, mercury, antimony and copper) and 38,200 acres rated as having moderate metallic mineral potential (gold, silver, lead, copper, iron, nickel, molybdenum and zinc). Ten thousand, eight hundred acres have high nonmetallic mineral potential (sand and gravel) and 14,100 acres have moderate nonmetallic mineral potential (barite). There is moderate geothermal potential on 24,300 acres and moderate oil and gas potential on 23,400 acres of that portion not recommended for wilderness.

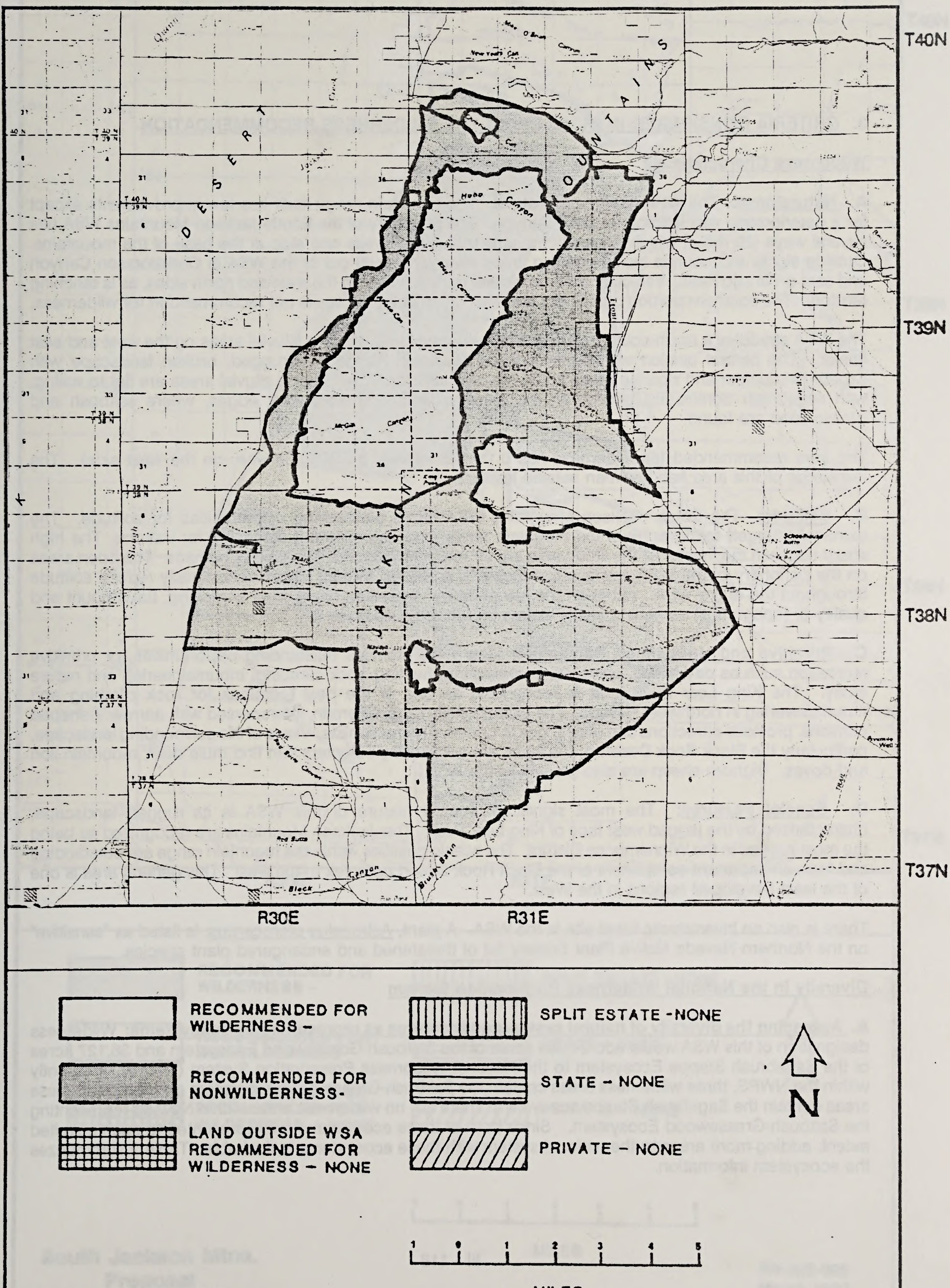
Short term interest for metallic minerals is likely within the South Jackson Mountains WSA. This interest would result in the development of four precious metal mines, totaling 1,600 acres within the study area. Cross country travel, drill pads, dozer trenches and open cuts would disturb an additional 45 acres. Although geothermal exploration in the study area has been on the wane, proposed developments are increasing in the surrounding areas. This interest would result in geothermal exploration consisting of cross country travel, small drill sites and one road disturbing fifteen acres.

Oil and gas exploration is expected to continue at the current rate disturbing an additional 20 acres. Current leases cover 5,332 acres in the portion not recommended with none in the portion recommended.

According to the mineral report developed by the U.S. Geological Survey and Bureau of Mines, several portions of the recommended area have moderate potential for undiscovered mineral resources. Iron may be present in part of the northeast and gold, silver, copper, lead or zinc may be located in the northeast and southeast. There is a total of approximately 3,350 acres with moderate mineral potential in the portion recommended for wilderness. The potential for undiscovered oil and gas and geothermal resources is low.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	60,211
Split Estate (BLM surface only)	0
Inholdings (State, Private)	80
Total	60,291
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	10,300
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	10,300
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	49,911
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	49,911
Inholdings (State, Private)	80



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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The WSA is primarily natural. The mountain range itself has few improvements except for a deteriorating way leading up Bliss Canyon. The periphery of the South Jackson Mountains WSA has several ways (20 miles) which generally traverse the alluvial areas and stop at the base of the mountains. Outside sights and sounds include mining areas cherrystemmed out of the WSA in Christiorsson Canyon and east of Navajo Peak. Vehicular traffic is visible, particularly from the west and north sides, as is ranching territory. The southern portion containing six miles of irrigation ditches is not recommended for wilderness.

The WSA straddles a north-south trending mountain range with fringing alluvial areas on the west and east flanks. The central portion within the Jackson Mountain Range is a rugged, broken landscape with sagebrush, juniper and riparian areas in the major drainages. The fringing alluvial areas are flat to rolling, with sagebrush dominating except on the extreme west and southwest edges, where saltbush and greasewood are found.

The area recommended for wilderness has 0.1 miles of way (in Bliss Canyon, on the west side). The remainder of this area has few man caused impacts.

B. Solitude: The South Jackson Mountains WSA offers outstanding opportunities for solitude. The extremely rugged topography of the mountain range provides excellent screening for visitors. The high sharp ridges in the interior of the study area are far removed from the influence of humans. The open areas on the periphery of the WSA are less conducive to solitude. Military flights occasionally reduce solitude throughout the entire WSA. Although the low shrubby vegetation offers poor screening, the amount and quality of topographic screening easily makes up for and surpasses it.

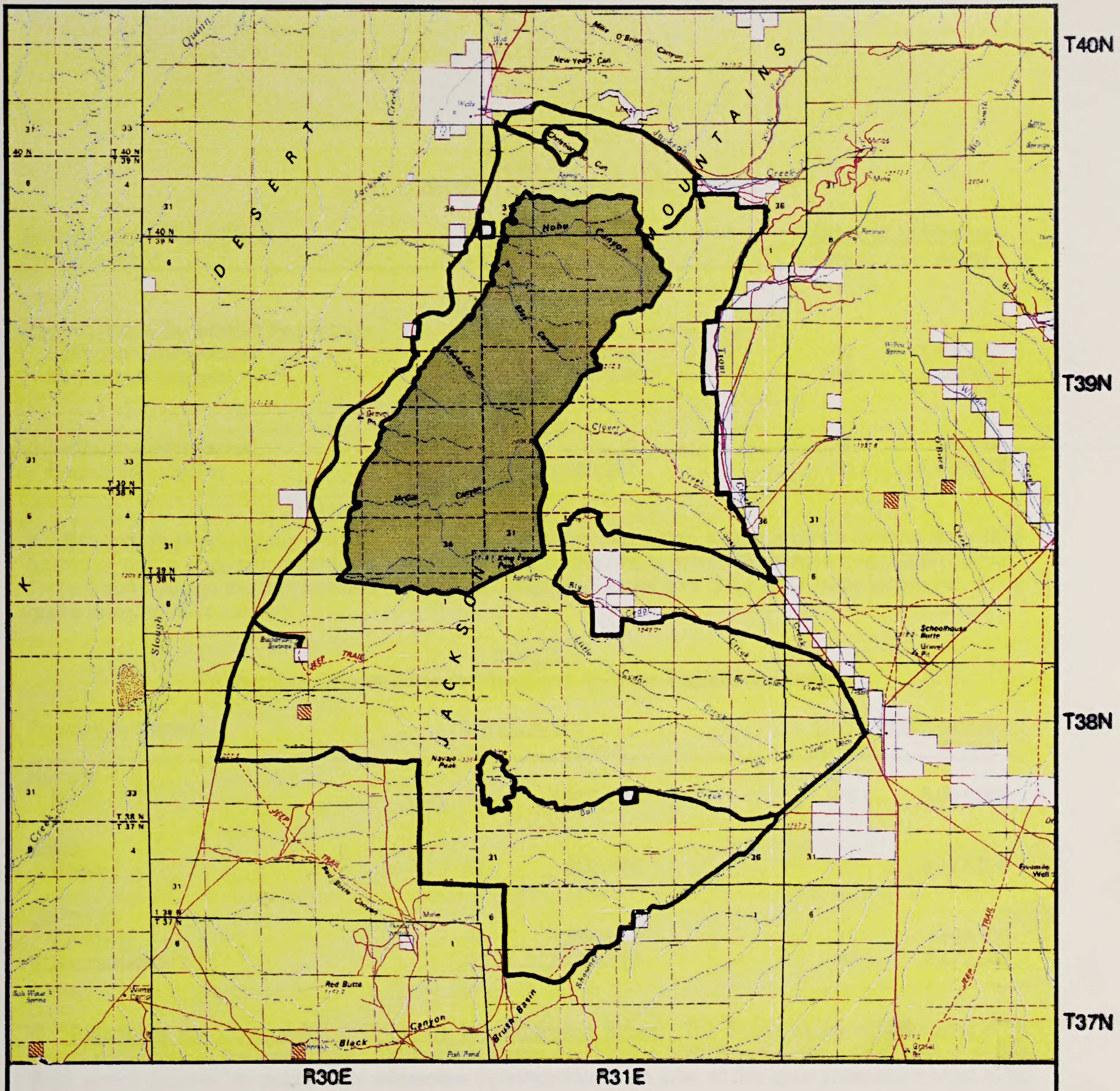
C. Primitive and Unconfined Recreation: The WSA provides outstanding opportunities for primitive recreation such as day hiking, camping, backpacking, hunting, rock climbing, mountaineering and nature study. The King Lear Peak area is recognized as one of the best locations for rock climbing and mountaineering in northwest Nevada. The exceptionally rugged terrain, interspersed with narrow V-shaped canyons, provides attractions and challenges to primitive recreationists. Views of the surrounding landscape, particularly the Black Rock Desert to the west, are noteworthy. Hunters can find mule deer, mountain lion and doves. Bighorn sheep are also present in the WSA.

D. Special Features: The most significant special feature of this WSA is its rugged landscape, characterized by the jagged west face of King Lear Peak. The Jackson Mountains are recognized as being the most rugged in the Winnemucca District. The scenic qualities within the mountain range are outstanding and form an important component of the Black Rock Desert complex to the west. This general area is one of the least developed regions in the West.

There is also an invertebrate fossil site in the WSA. A plant, Astragalus pterocarpus, is listed as "sensitive" on the Northern Nevada Native Plant Society list of threatened and endangered plant species.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 24,084 acres of the Saltbush-Greasewood Ecosystem and 36,127 acres of the Sagebrush Steppe Ecosystem to the National Wilderness Preservation System (NWPS). Presently within the NWPS, three wilderness areas contain the Saltbush-Greasewood ecosystem and four wilderness areas contain the Sagebrush Steppe ecosystem. There are no wilderness areas within Nevada representing the Saltbush-Greasewood Ecosystem. Since both of these ecosystems are represented to such a limited extent, adding more areas to the national system with these ecosystems is desirable. Table 2 summarizes the ecosystem information.



▒	RECOMMENDED FOR WILDERNESS –	▥	SPLIT ESTATE - NONE
☐	RECOMMENDED FOR NONWILDERNESS ·	▤	STATE – NONE
▦	LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE	▨	PRIVATE – NONE

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Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Saltbush-Greasewood	3	45,553	41	1,156,347
Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Saltbush-Greasewood	0	0	12	367,366
Sagebrush Steppe	2	86,907	33	1,469,316

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers:** The WSA is within a five hour's drive of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Center	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
Idaho				
Boise	22	937,766	172	5,127,039
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541

C. **Balancing the geographic distribution of wilderness areas:** The South Jackson Mountains WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The portion of the WSA recommended for designation is considered manageable. However, there will be manageability concerns with the 100 acres of mining claims which would be included in the designated wilderness.

The portion of the WSA not recommended for wilderness could also be managed as wilderness. There would be some manageability difficulties with the 800 acres of mining claims, 80 acres of private inholdings, 5,332 acres of oil and gas leasesand the extensive amount of ORV accessible lands.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) past and present mining activities and (7) the U.S.G.S. Mineral Report. This report is a compilation of the results of geologic, geochemical, geophysical and mineral surveys conducted in 1984 and 1985.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 11,500 acres of highly favorable land for metallic minerals (gold, nickel*, lead*, zinc*, mercury*, silver, antimony* and copper*); 47,300 acres of moderately favorable land for metallic minerals (gold, silver, lead*, copper*, iron, nickel*, molybdenum and zinc*); 11,700 acres of highly favorable land for nonmetallic minerals (sand and gravel); and 15,800 acres of moderately favorable land for nonmetallic minerals (barite); 24,300 acres of moderate potential for geothermal steam; and 24,300 acres with moderate potential for oil and gas.

Lump iron ore, copper, gold, silver, lead, zinc, antimony and mercury have all been produced from the Jackson Creek District, the Red Butte District and surrounding mining areas. The Mesozoic volcanic and sedimentary rocks of the South Jackson Mountains have been deposited in an island arc geologic setting and are prime host rocks for significant mineralization.

There are 900 acres of mining claims and 5,332 acres of oil and gas leases present. There is no present production of any mineral, geothermal or oil or gas resources in the study area.

In summary, quantities of various materials are unknown, but the potential for occurrence is from moderate to high in several parts of the WSA as identified in the Environmental Impact Statement.

Impacts on Resources

The comparative impact table (Table 4) on the following pages summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)	No Wilderness
Impacts on Wilderness Values	Wilderness values would be preserved on 10,300 acres. The special features - King Lear Peak and Alaska and Bliss Canyons are within this portion. Naturalness would be impaired on approximately 38% or 18,915 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on approximately 59% or 29,410 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA except for 1,630 acres of valid discoveries located in the vicinity of Christiorson and Bliss Canyons and Navajo Peak. The special features - Hobo, Alaska and McGill Canyons and King Lear Peak - would receive long-term protection.	Wilderness values would be preserved on 19,694 acres. The special features - McGill Canyon and Navajo Peak - are within this area. Naturalness, solitude and primitive unconfined recreation opportunities would be reduced on about 33% or 13,728 acres due to ORV use, projected energy and mineral activity (400 acres near Bliss Canyon) and proposed vegetative manipulation. Solitude would be adversely impacted on approximately 31% or 12,300 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.	Solitude would be adversely impacted on approximately 20% or 12,042 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation. None of the special features would receive long-term protection from ORV use, energy and mineral activity and vegetative manipulation.
Impacts on the Level of Exploration for Oil and Gas and Geothermal Resources	No energy exploration or development is expected in the area recommended for wilderness. Projected geothermal and oil and gas exploration would be possible in the area not recommended for wilderness.	Geothermal and oil and gas exploration opportunities would be foregone.	No energy exploration or development is expected in the area recommended for wilderness. Projected geothermal and oil and gas exploration opportunities would be possible in the area not recommended for wilderness.	Projected geothermal and oil and gas exploration opportunities would be possible.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)	No Wilderness
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal exploration opportunities would be foregone in the area recommended for wilderness. Projected base-precious metal, nonmetallic mineral exploration, development of 4 large open pit base-precious metal and 3 small underground base-precious metal mines would be possible in the area not recommended for wilderness.	Projected base-precious metal and nonmetallic mineral exploration opportunities would be foregone. Projected development of 4 large open pit base-precious metal and 3 small underground base-precious metal mines would be allowed due to valid discoveries.	Projected base-precious metal and nonmetallic mineral exploration opportunities would be foregone in the area recommended for wilderness. Projected development of 1 large open pit base-precious metal mine partially within this area would be allowed due to valid discoveries. Projected base-precious metal, nonmetallic mineral exploration, development of 4 large open pit base-precious metal mines and 3 small underground base-precious metal mines would be possible in the area not recommended as wilderness.	Projected base-precious metal, nonmetallic mineral exploration, development of 4 large open pit base-precious metal and 3 small underground base-precious metal and 3 small base-precious metal mines would be possible.
Impacts on Motorized Recreational Use	Ten visitor hours of current ORV use and 15 hours of future use would be displaced annually in the portion recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 290 hours to 650 visitor hours annually.	Three hundred visitor hours of current ORV use and 660 hours of foreseeable future use would be displaced annually. This use would be absorbed on adjacent lands.	Thirty visitor hours of current ORV use and 60 visitor hours of foreseeable future use would be displaced annually from the area recommended for wilderness. This use would be absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 270 visitor hours to 660 hours annually.	ORV use would grow from the current 300 visitor hours to 660 hours annually.
Impacts on Range Conditions	The proposed vegetative manipulation project would result in an improvement of range conditions on 2,150 acres.	The proposed vegetative manipulation project would not be permitted under wilderness designation.	The proposed vegetative manipulation project would result in an improvement of range condition on 2,150 acres.	The proposed vegetative manipulation project would result in an improvement to range conditions on 2,150 acres.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 29 comments received discussed characteristics of the area (e.g., Intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: naturalness, special features and opportunities for solitude. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunities for solitude. These comments addressed the entire 72,240 acres of this study area. About 14,000 acres have been released from wilderness consideration.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the three oral comments received, two of them supported the draft EIS preferred alternative (19,094 acres recommended for wilderness) and one supported less wilderness than that recommended in the draft EIS. Of the 85 written comments that were received, 69 people supported more wilderness than the draft EIS, 11 supported the preferred alternative and 5 supported less wilderness. Several comments mentioned the roads and the military flights as detriments to solitude and also the mineral potential; most of the others extolled the quality of the wilderness experiences in the WSA, the scenery (especially in the canyons), the springs and streams for fish habitat, the primitiveness and the need to protect wildlife habitat.

No comments about wilderness were received from Humboldt County agencies or officials.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "This WSA has significant wilderness values. However, it also has substantial mineral potential, manageability problems and is easily accessible to off-road vehicles. The alternative developed for the Management Framework II Plan is a good compromise, drawing back the boundaries to eliminate the most severe conflicts. We recommend the MFP II alternative rather than the BLM's preferred alternative." The letter was in response to the Draft Wilderness Environmental Impact Statement. The BLM has reevaluated the mineral potential and the management concerns and has adjusted its recommendation to the MFP II alternative.

The U.S. Air Force supports wilderness designation provided no restrictions are placed on military flights. It said it would work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

NORTH JACKSON MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 26,457 acres

The North Jackson Mountains WSA (NV-020-606) is located in northwest Nevada in Humboldt County, about a 4-hour drive northeast of Reno. The WSA includes 26,457 acres of public lands and surrounds 681 acres of private land (Table 1).

The western boundary of the WSA is formed by the Jackson Creek Ranch Road and a series of legal boundaries skirting private land and mining intrusions. The North Deer Creek Peak Road and the Willow Spring Road form the northern boundary of the WSA. The eastern boundary follows the Happy Creek Road and a series of private lands and legal boundaries. The WSA's southeastern boundary follows the Iron King Mine Road where it joins with the Jackson Creek Road. This road, along with several patented mining claims and other private land forms the southern boundary of the WSA.

The North Jackson Mountains WSA runs about 7 miles north-south and about 6 to 7 miles east-west. It straddles a north-south trending range with fringing alluvial areas on the west and south ends. The majority of the WSA is in the Jackson Mountains with an extremely rugged, dissected landscape with sagebrush, juniper and riparian areas in the major drainages. The fringing alluvial areas are flat to rolling, with sagebrush predominating on all but the western edge, where greasewood is dominant. This study area lies on the eastern edge of the Black Rock Desert which is recognized for its stark and natural ruggedness. Elevations in the WSA range from 4,000 to 8,400 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 11,100 acres would be designated as wilderness and 16,038 acres would be released for uses other than wilderness, and a no wilderness alternative, which is the recommendation of this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 26,457 acres recommended for nonwilderness

The recommendation for this WSA is to release all 26,457 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The study area is recommended for uses other than wilderness to emphasize continued access to and the possible development of potential mineral resources. There are significant mineral resource potential and manageability concerns.

Thirty-nine percent of the WSA (10,300 acres) has high metallic mineral potential for silver, lead, iron and copper while an additional 50% (13,100 acres) has moderate metallic mineral potential for silver, gold, copper and mercury. Fifteen percent of the study area (4,100 acres) has high nonmetallic mineral potential for sand and gravel and 23% (6,000 acres) has moderate nonmetallic mineral potential (barite). Twenty-seven percent of the WSA (7,100 acres) has moderate geothermal potential and 15% (4,100 acres) has moderate oil and gas potential. There are 500 acres of pre-FLPMA mining claims on the periphery of the study area, generally corresponding to the areas of highest mineral potential.

It is projected that there would be 855 acres of disturbance created by new mineral exploration and development as well as extensions of present operations. It is also projected that thirteen miles of access roads would be constructed as well as three powerlines. Drill pads, dozer trenches and open cuts would also be a part of these operations. Projected geothermal and oil and gas exploration would impair 15 acres. A total of 870 acres would be disturbed by the combination of mineral development and energy exploration.

The WSA is significantly affected by outside sights and sounds, including mining areas on the north, east, southeast, south and southwest boundaries. Development of these operations would reduce the wilderness values due to the intrusions of manmade noises and visual impacts. Extensive ranching operations are in close proximity to the WSA, with several major ranch headquarters, the growing of livestock feed and associated vehicles, tractors and large trucks present. These activities are visible from approximately one-half of the WSA. The entire study area is subject to occasional military flights. There are 7 miles of ways within the boundaries.

There are manageability concerns with the 681 acres of private inholdings (480 acres in the heart of the WSA). The proximity of these parcels to the portion of the WSA with the highest wilderness values complicates the manageability of the entire WSA. Since the BLM is required to provide reasonable access to inholding owners, construction of access roads through the area would be an additional erosion of wilderness values.

In summary, it was determined that this manageability concern, coupled with the moderate to high mineral values, outweighed the value of managing this area as wilderness.

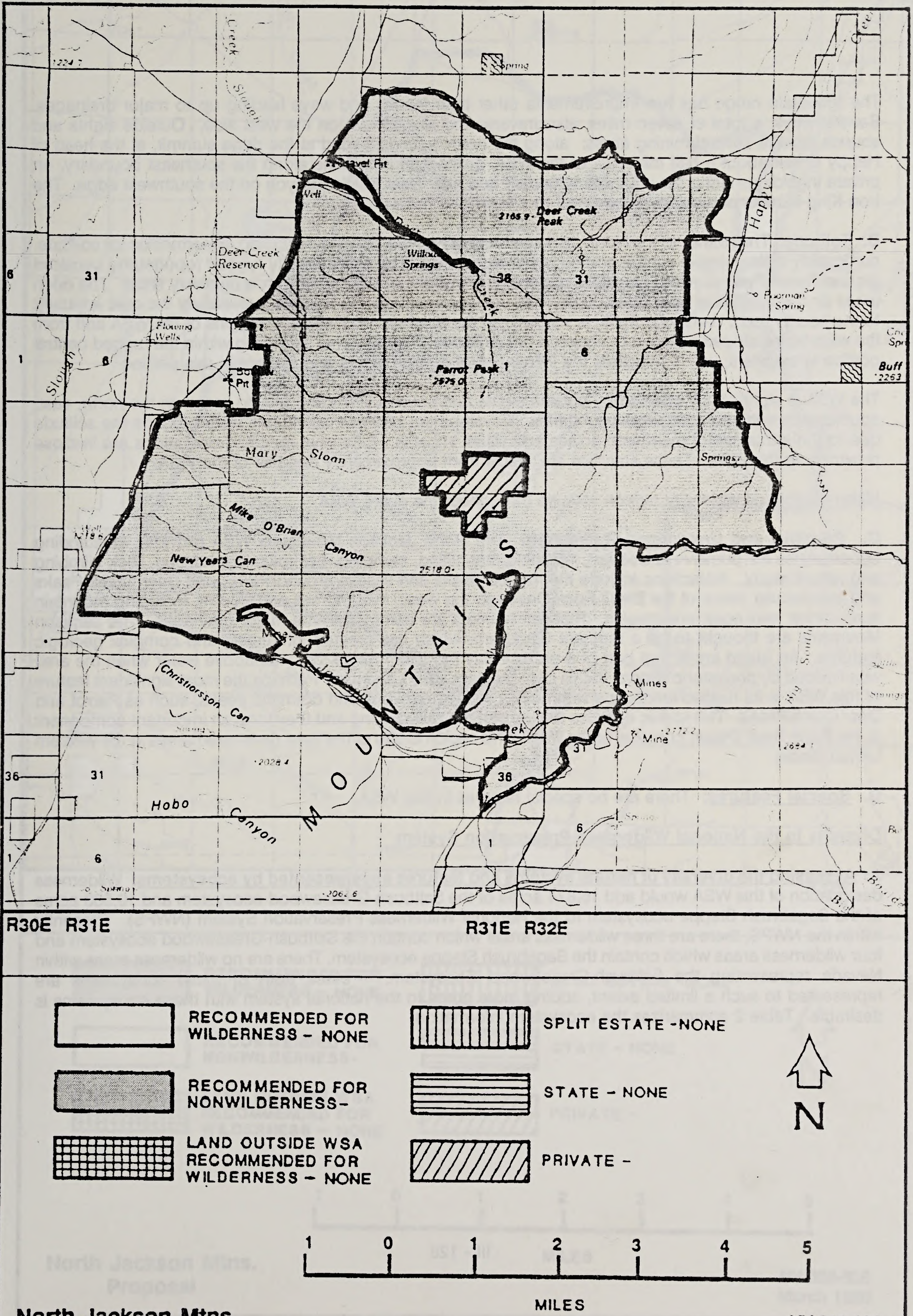
Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	26,457
Split Estate (BLM surface only)	0
Inholdings (State, Private)	681
Total	27,138
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	26,457
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	26,457
Inholdings (State, Private)	681

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. **Naturalness:** The WSA is predominantly natural. The study area straddles a north-south trending range with fringing alluvial areas on the west and south ends. The majority of the WSA is in the Jackson Mountains with an extremely rugged, dissected landscape major drainages. The fringing alluvial areas are flat to rolling. This study area lies on the eastern edge of the Black Rock Desert which is recognized for its stark and natural ruggedness.



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The mountain range has few improvements other than fences and ways leading up to major drainages. Several ways, a total of seven miles, also traverse the alluvial fans on the west side. Outside sights and sounds include several mining areas: along the north boundary road at the ridge summit, at the head of Happy Creek about a half mile east of the WSA, at the Iron King Mine along the southeast boundary, on private inholdings along the southern boundary and near New Year's Canyon on the southwest edge. The Iron King Mine is particularly detrimental to a feeling of naturalness.

B. Solitude: The interior of the North Jackson Mountains WSA offers outstanding opportunities for solitude, particularly in the rugged central portion of the study area. The exceptionally rugged topography centered around Parrot Peak provides excellent screening for visitors although this area is relatively small. The open areas on the south and west sides of the WSA are less conducive to solitude, particularly the area adjacent to the county road. Vehicular traffic is visible from the southern and western margins of the WSA and from the west-facing slopes adjacent to Jackson Creek Ranch. Topographic screening within the rugged central portion is excellent, which mitigates the influences of outside sights and sounds in this portion.

The WSA is significantly affected by outside sights and sounds, including mining areas on the north, east, southeast, south and southwest boundaries. Development of these operations would reduce the solitude due to the intrusions of manmade noises and visual impacts. Extensive ranching operations are in close proximity to the WSA. These activities are visible from approximately one-half of the WSA.

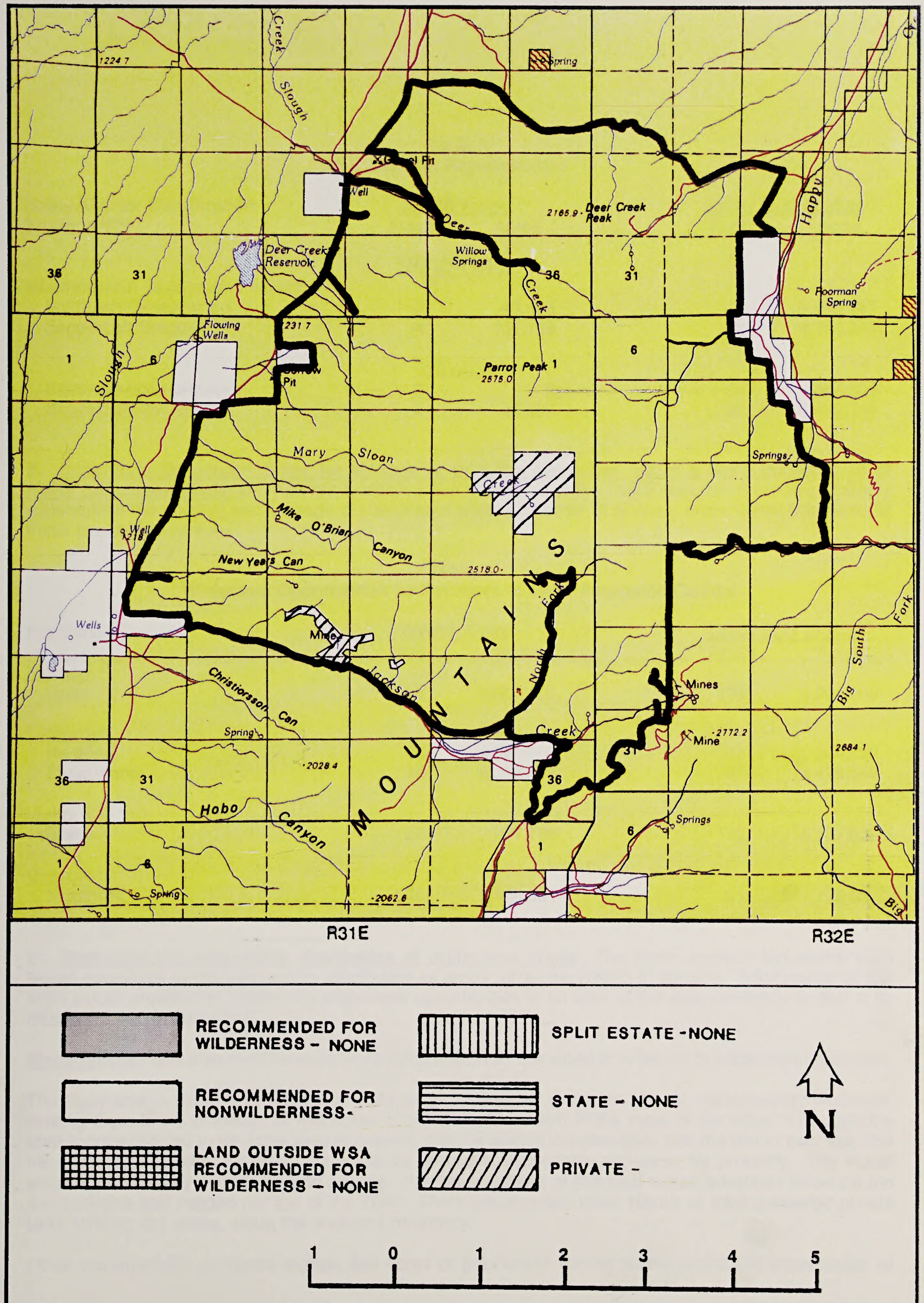
Military flights occasionally reduce solitude throughout the entire WSA.

C. Primitive and Unconfined Recreation: The North Jackson Mountains WSA provides outstanding opportunities for primitive recreation, including day-hiking, camping, backpacking, hunting, rock climbing and nature study. Attractions include the rugged peaks and valleys around Parrot and Deer Creek Peaks and spectacular views of the Black Rock Desert to the west. Wild horses and wildlife, including mountain lion, chukar and quail, are present. Riparian habitats are common in the major drainages. The Jackson Mountains are thought to be a remnant island arc, which has created interesting and complex geologic features. An island arc is that part of a present day mountain range that was above water when the area was flooded by prehistoric waters, in this case, ancient Lake Lahontan. Perhaps the most significant feature of this WSA is its rugged landscape with deeply incised canyons and dramatic peaks, such as Parrot and Deer Creek Peaks. The scenic qualities are considered outstanding and they form an important component in the Black Rock Desert complex to the west. This region is one of the least developed areas in the western United States.

D. Special Features: There are no special features in this WSA.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 15,874 acres of the Saltbush-Greasewood ecosystem and 10,583 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently within the NWPS, there are three wilderness areas which contain the Saltbush-Greasewood ecosystem and four wilderness areas which contain the Sagebrush Steppe ecosystem. There are no wilderness areas within Nevada representing the Saltbush-Greasewood Ecosystem. Since both of these ecosystems are represented to such a limited extent, adding more areas to the national system with these ecosystems is desirable. Table 2 summarizes the ecosystem information.



North Jackson Mtns.
Proposal

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Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Saltbrush-Greasewood	3	45,553	41	1,156,347
Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Saltbrush-Greasewood	0	0	12	367,336
Sagebrush Steppe	2	86,907	33	1,469,316

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time of major population centers**: The WSA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours of these population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039
Oregon				
Medford	31	2,440,081	21	730,038

C. **Balancing the geographic distribution of wilderness areas**: The North Jackson Mountains WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is capable of being managed as wilderness but there are several manageability problems. Among them is the presence of 480 acres of private land located in the heart of the WSA. Although the area is not expected to be developed at present, there is always the possibility that the owner may exercise his option and develop his land. He would be entitled to reasonable access to his property. This would entail approximately 4 miles of road access. Any development of this land would adversely influence the most pristine and rugged portion of the WSA. There are also two other blocks of mining-scarred private land, totaling 201 acres, along the southern boundary.

Other manageability problems include 500 acres of pre-FLPMA mining claims and 3,696 acres under oil and gas leases. Most of the mining claims, if developed, would not seriously influence overall wilderness manageability, except for a large block around Mike O'Brian Canyon in the southwest corner of the WSA. The oil and gas leases are along the alluvial flats which are already influenced by nearby ranching and vehicular traffic.

There are also a number of management concerns. These include outside sights and sounds from nearby mining and ranching operations affecting most of the periphery of the WSA and reducing the feeling of naturalness in about half of the WSA. These include mines along the north boundary at the head of Happy Creek on the northeast, the Iron King Mine along the southeast boundary, and operations near New Year's Canyon on the southwest edge. Ranches on the west side would also affect management.

Approximately 5,000 acres are accessible to off-road vehicles, especially on the alluvial areas on the west side of the WSA. Although most roads and ways are restricted to these fans, several continue up canyons such as the North Fork of Jackson Creek, Deer Creek and New Year's Canyon.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 10,300 acres of land have a highly favorable potential for metallic minerals (silver, lead*, iron, copper*), 4,100 acres of land have a highly favorable potential for nonmetallic minerals (sand and gravel), 6,000 acres of land have moderately favorable potential for nonmetallic minerals (barite), 7,100 acres have moderately favorable potential for geothermal steam and 4,100 acres have moderately favorable potential for oil and gas. Lump iron ore, copper*, gold and silver have been produced from the Jackson Creek Mining District, the Bottle Creek Mining District and surrounding mining areas. The Mesozoic volcanic and sedimentary rocks of the North Jackson Mountains have been deposited in an island arc geologic setting and are prime host rocks for significant mineralization.

Surface disturbance resulting from projected mineral exploration and development activities would impair the natural character on 855 acres. Projected development of a 500 acre base-precious metal open pit mine and associated two miles of access road and powerline would be located in the southwest portion of the study area. A 500 acre (100 acres in WSA) base-precious metal open pit mine and associated four miles of access road and powerline are projected for the southeast tip. A 200 acre expansion of two mines and the associated two miles of access road would be allowed in the south center portion of the area.

Base-precious metal exploration consisting of cross-country travel, five miles of drill roads, drill pads, dozer trenches and open cuts are projected for four other areas. The expansion of existing county gravel pits and one new county gravel pit and 1/2 mile of access road are projected for the west side of the WSA. Projected geothermal and oil and gas exploration consisting of cross country travel, small drill sites and one mile of access roads would disturb 15 acres on the west and northwest side of the WSA. A total of 870 acres would be disturbed by projected energy and mineral activity.

There is no present production of any mineral or geothermal resources in the study area. In summary, quantities of various mineral and energy resources are unknown, but the potential for occurrence is from moderate to high in several portions of the WSA.

Impacts on Resources

The following comparative impact table (Table 4) summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)
Impacts on Wilderness Values	None of the 26,457 acres would receive long-term protection.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA except on 800 acres of valid discoveries in the southeast and southwest parts of the WSA.	Area Recommended for Wilderness: Wilderness values would be preserved on 11,100 acres. The special features of Parrot Peak, Mike O'Brian and Mary Sloan Canyons are within this portion.
-Naturalness	Naturalness would be impaired on approximately 39% or 10,360 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.		Area Not Recommended for Wilderness: Naturalness would be impaired on approximately 57% or 8,725 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.
-Solitude	Solitude would be adversely impacted on approximately 34% or 10,360 acres from increased ORV use, energy and mineral activity and vegetative manipulation.		Solitude would be adversely impacted on approximately 6% or 845 acres as a result of increased ORV use, energy and mineral activity and vegetative manipulation.
-Primitive Recreation	Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.		Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.
-Special Features	The special features - Deer and Parrot Peaks, and New Years Canyon - would not receive long-term protection. However, it is anticipated that most of the activity would occur away from these features which would assure their continuance.	The special features of the WSA - Deer and Parrot Peaks and New Years and Mary Sloan Canyons - would receive long-term protection.	There are no suitable features in the portion not recommended for wilderness.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal, nonmetallic mineral exploration, development of 3 large open pit base-precious metal mines and 2 small gravel pits would be possible.	Projected base-precious metal, nonmetallic mineral exploration and development of 2 small gravel pits would be foregone. The projected development of 3 large open pit base-precious metal mines would be possible due to valid discoveries.	Projected base-precious metal exploration and nonmetallic mineral exploration opportunities would be foregone in the portion recommended for wilderness. Projected base-precious metal exploration, development of 3 large base-precious metal mines and development of 2 small gravel pits would be possible in the area not recommended for wilderness.
Impacts on the Level of Exploration for Oil and Gas and Geothermal Resources	Projected geothermal and oil and gas exploration would be possible.	Projected geothermal and oil and gas exploration opportunities would be foregone.	No energy exploration or development is expected in the portion recommended for wilderness. Projected geothermal and oil and gas exploration opportunities would be possible in the area not recommended for wilderness.
Impacts on Motorized Recreational Use	ORV use would grow from the current 40 visitor hours to 130 hours annually.	Sixty visitor hours of current ORV use and 130 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.	ORV use would not change in the portion recommended for wilderness because there is no ORV accessible land. ORV use in the area not recommended for wilderness would grow from the current 60 visitor hours to 130 hours annually.
Impacts on Range Condition	The proposed vegetative manipulation project would result in an improvement of range conditions on 4,490 acres.	The proposed vegetative manipulation would not be permitted under wilderness designation.	Approximately 1,600 acres of proposed vegetative manipulation would not be permitted under wilderness designation and range condition would not change.

Local Social and Economic Considerations

Social and economic considerations were not considered to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 26 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status include the following: opportunities for solitude, its naturalness and special features. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunity for solitude. These comments addressed the entire 82,000 acres of the original study area. About 52,000 acres have since been removed from wilderness consideration.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the six oral comments, all of them supported more wilderness than the Proposed Action (No Wilderness). Of the 72 written comments, 66 of them supported more wilderness than the draft EIS did and six people agreed with the Proposed Action. Specific comments referred to the private lands and other intrusions and the military flights that would lessen the opportunities for solitude, about the difficulty of cattle management under wilderness designation and the mineral potential in the WSA. Several comments mentioned the need to preserve the naturalness and the wildlife habitat.

No comments about wilderness were received from Humboldt County agencies or officials.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We concur with your recommendation that this area not be considered wilderness status (sic). It is an area of substantial mineral potential with a large private inholding and many roads and ways." This letter was written in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Air Force said it supported wilderness status provided no restrictions were placed on military flights. It will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

BLACK ROCK DESERT WILDERNESS STUDY AREA

1. THE STUDY AREA - 319,594 acres

The Black Rock Desert WSA (NV-020-620) is located in northwest Nevada in Humboldt and Pershing Counties, about a 3 hour drive northeast of Reno. The WSA includes 319,594 acres of public lands and surrounds 35 acres of private lands (Table 1).

The eastern boundary of the WSA is formed by the Sulphur-Jackson Creek Ranch Road and some scattered private parcels. Starting at the junction of the Sulphur-Black Rock Point and the Sulphur-Jackson Creek roads, the southernmost point of the WSA, the boundary proceeds to the north and a little eastward along the Sulphur-Jackson Creek Ranch Road, going around private land in Section 28, T. 39 N., R. 31 E. Continuing northward on the Sulphur-Jackson Creek Ranch Road, the boundary goes around the Jackson Creek Ranch until it meets the unnamed road that is located 1/2 mile east of the Sulphur-Jackson Creek Ranch Road and parallels it until it reaches the Leonard Creek Ranch-Jackson Creek Ranch Cutoff. The boundary follows this cutoff to the northwest until it meets the Leonard Creek Ranch Road. At this point the boundary heads west, maneuvering around private land at the Leonard Creek Ranch until it reaches the Battle Creek Ranch Road, which it follows to the south.

When the boundary reaches the private land of the Battle Creek Ranch, it follows the unnamed road to the east for 2 miles until just inside Section 5. It then turns south, following a stream for approximately two and a half miles until it reaches Section 18, where it proceeds to the east, using the border of the disturbed land as a guide. The boundary proceeds to the east to a point near the center of Section 16 where it curves south until it meets the road in Section 21. Here the boundary heads due west to the center of Section 20, staying out of the disturbed area. It then proceeds south until it meets the road at the line between Sections 20 and 28. The boundary follows this road to the north and then to the west to the Battle Creek Ranch Road. It then heads south until it meets the road in Section 4 that bypasses the Paiute Meadows Ranch. Using this road but jockeying around parcels of private lands, the boundary continues to the south. Approximately 1 mile south of Cain Spring, the boundary remeets the Battle Creek - Paiute Meadows Ranch Road and continues to the south. When the road reaches the southern edge of T.36 N., the boundary turns to the east, following the section line for 2 miles, until it reaches the Sulphur - Black Point Road, at which time it proceeds southeast to the junction of that way and the Sulphur - Jackson Creek Ranch Road, the starting point.

The WSA is elongated, measuring approximately 40 miles long north-south and 20 miles east west, tapering to a narrow point on the southern tip.

The Black Rock Desert WSA encompasses the eastern arm of the Black Rock Range and the Jackson Mountain Range. The area is a large, dry alkali lakebed, the remains of prehistoric Lake Lahontan. Three major drainage systems flow through the study area but supply a limited amount of water for a short period of time. The Quinn River, an ephemeral stream, meanders nearly 90 miles through the WSA during periods of high runoff. Isolated islands of desert playa and scatterings of saltbush, greasewood and sagebrush create an unusual mosaic pattern of cover throughout the WSA. This vegetative pattern is further enhanced by the hummocky terrain along the perimeter of the area, which is created by numerous small mounds of greasewood and sagebrush. Local relief throughout the valley floor is minimal, generally less than ten feet. Elevations range from 3,900 to 5,000 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were four alternatives analyzed in the EIS: an all wilderness alternative; a partial wilderness alternative where 317,734 acres would be designated as wilderness and 1,860 acres would be released for uses other than wilderness; a second partial wilderness alternative where 174,300 acres would be designated as wilderness and 145,294 acres would be released for uses other than wilderness; and a no wilderness alternative.

2. RECOMMENDATION AND RATIONALE - 219,300 acres recommended for wilderness
100,294 acres recommended for nonwilderness

The recommendation for this WSA is to designate 219,300 acres as wilderness and to release 100,294 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferrable alternative as it would result in the least change from the natural environment over the long-term. The partial wilderness alternative, the recommendation of this report, would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The current recommendation differs from the proposed action included in the Winnemucca Wilderness EIS because final reviews of the proposed boundaries revealed that it was unlikely they could be signed or managed in a manner which would be clear to the public. Using the recommendation developed during the EIS process, BLM made modifications to the east, south and west boundaries in order to better utilize natural features. While it was not possible to eliminate all of the point-to-point and projected section lines from the proposed boundary, a much greater use was made of natural features and reference points. The changes added 45,000 acres to the original proposed action.

The original EIS proposal was developed following public participation and input. The Winnemucca District requested assistance from the public in the form of a "blue ribbon" panel, composed of different interests, to consider the many and varied uses of the Black Rock Desert WSA and to recommend the best management approach. Members included a miner, a locally elected official, an environmentalist, an archeologist, an educator, a local rancher, a businessman and a representative of Nevada's Division of State Parks. The BLM's recommendation recognizes the panel's intent and made adjustments only to the extent necessary to improve boundary identification.

The recommended area would protect a natural landscape which consists of an essentially flat valley floor/playa ecosystem with an intermittent river flowing through the center of it. This is probably the largest undisturbed example of such an ecosystem in the contiguous United States and its addition to the National Wilderness Preservation System would increase the diversity of wilderness areas in the country. There are outstanding opportunities for solitude provided by the area's large size. The area recommended for wilderness includes the most natural portion of the WSA and includes part of the Quinn River and previously identified archeologic and paleontological sites.

Several locations along the perifery of the WSA are presently affected by recreational off-road vehicle activities and by geologic exploration. The panel recommended that these areas be managed for current uses rather than include them within the recommended wilderness area.

The southernmost section receives the heaviest off road vehicle use. By not recommending this area for wilderness, it was felt that ORV enthusiasts would be able to continue to enjoy their activities. Although a portion of this section includes the Quinn River, the river at this point lacks a clearly defined channel or other features which would warrant or benefit from wilderness designation. The extreme southern tip is influenced by the Southern Pacific Railroad and contains a large block of mining claims. Most of this area has oil and gas and geothermal leases.

A second area not recommended is located in the northern portion of the WSA. It is immediately adjacent to an often traveled road and the Jackson Creek Ranch to the northeast. There are also setbacks which vary between 1/2 to 3 miles to avoid impacts of sights and sounds from the road and ranch. All of this portion is accessible to ORVs. It was judged that by pulling the boundary away from the private land and the road, the recommended portion would retain its high wilderness values.

A third area is on the western side and portions of it are visible from the three major ranches located on the periphery of the WSA boundary. This portion also has a few oil and gas leases and one block of mining claims. It was felt that this area should be left open for mineral exploration and/or development.

A fourth area is a 1/4-mile setback from the western boundary road to avoid impacts from the road. This setback was also created to allow the off-road vehicle user to be able to drive on the periphery of the desert.

The BLM's and the panel's recommendation also includes designation of the entire WSA as an Outstanding Natural Area. Therefore if new archaeologic or paleontologic sites were discovered which would be impacted by off-road vehicle use (that portion outside of any designated wilderness), the BLM could close the affected area to vehicles or use other restrictions as necessary.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	319,594
Split Estate (BLM surface only)	0
Inholdings (State, Private)	35
Total	319,629
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	219,300
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	219,300
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	100,294
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	100,294
Inholdings	35

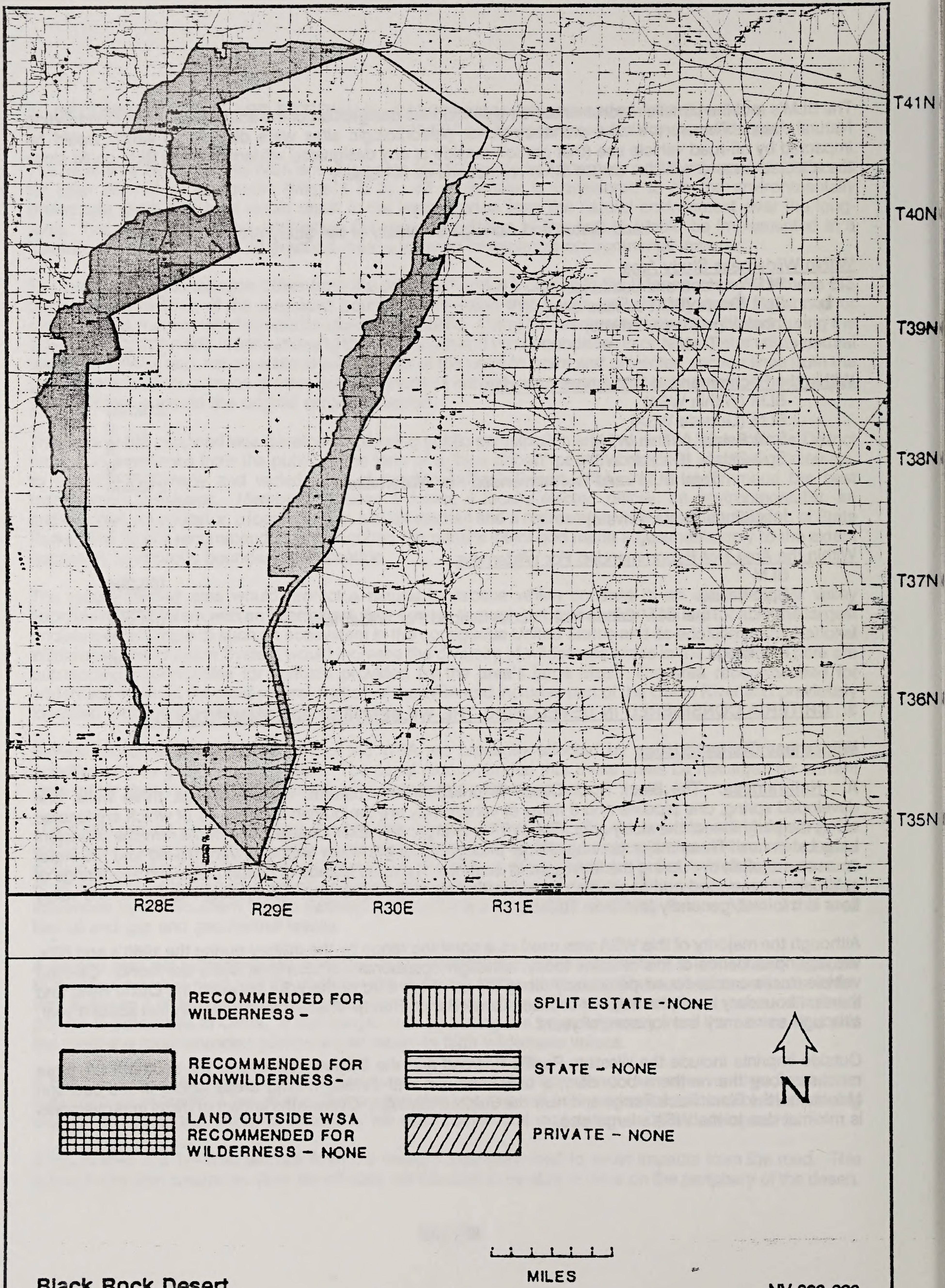
3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness: The Black Rock Desert is predominantly natural. Five windmills, three wells, one developed spring, one pipeline and 8 miles of vehicle way are the human imprints, all of which are located along the perimeter of the study area. The WSA is a large, dry, alkali lakebed, one of the remains of ancient Lake Lahontan. Three major drainages flow through it but the water supply is very limited and the water courses are often dry during the latter part of summer. Isolated islands of desert playa and scatterings of saltbush, greasewood and sagebrush create intriguing mosaic patterns. Local relief throughout the valley floor is minimal, generally less than 10 feet.

Although the majority of this WSA was used as a bombing range by the military during the 1950's and 60's, virtually no evidence of this remains today, although occasionally ammunition shells are found. Off-road vehicle tracks can be found particularly along the southern third of the WSA between the Quinn River and the east boundary road (the Sulphur-Jackson Creek Ranch Road). These tracks generally last about a year, although some may last for several years.

Outside imprints include the Western Pacific Railroad and the Sulphur townsite at the southern tip, three ranches along the northern boundary, a telephone line and several mining areas visible in the Jackson Mountains, the Black Rock Range and near the Sulphur townsite. Overall, the impact of these improvements is minimal due to the WSA's large size.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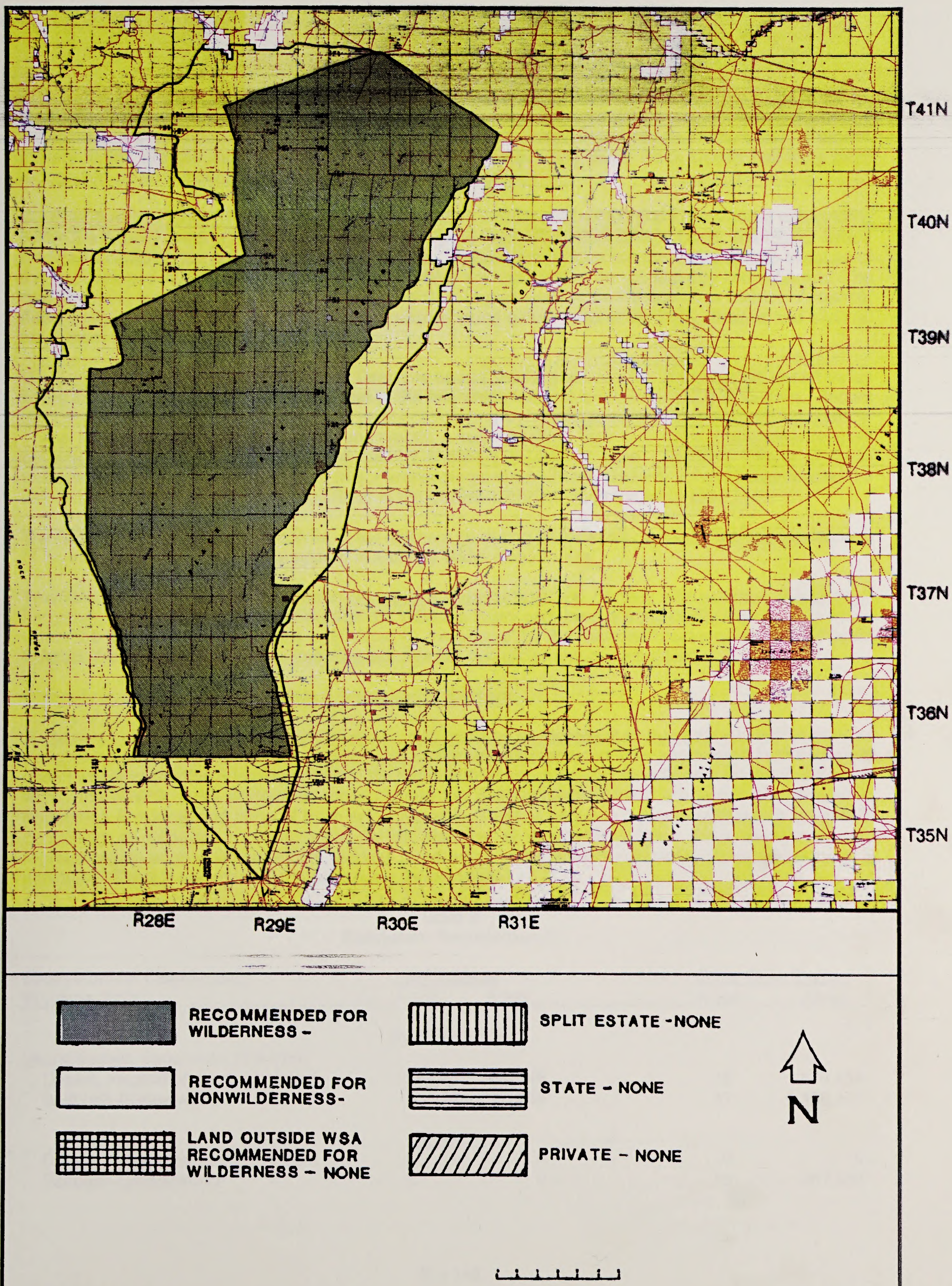
T40N
T39N
T38N
T37N
T36N
T35N
R28E
R29E
R30E
R31E
RECOMMENDED FOR WILDERNESS -
RECOMMENDED FOR NONWILDERNESS-
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE
SPLIT ESTATE -NONE
STATE - NONE
PRIVATE - NONE
N
MILES

Black Rock Desert
Proposal

NV-020-620
March 1990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T37N
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T35N
R28E
R29E
R30E
R31E
RECOMMENDED FOR WILDERNESS -
RECOMMENDED FOR NONWILDERNESS-
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE
SPLIT ESTATE -NONE
STATE – NONE
PRIVATE – NONE
N
MILES

Black Rock Desert Proposal

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B. Solitude: Although topographic and vegetative screening throughout the WSA are minimal, opportunities for solitude are considered outstanding due to the size and undeveloped nature of the area. Frequent military flights are the most detrimental influence on solitude. The Black Rock Desert has long been recognized as an outstanding place to "get away from it all".

C. Primitive and Unconfined Recreation: No primitive recreational activities are considered outstanding within the WSA. However, raft trips are feasible along the Quinn River during high runoff, and hiking, nature study and camping are possible recreation pursuits. These opportunities are viewed as unique because of the undeveloped nature of the WSA, but nonetheless not outstanding to the average recreationist. The overwhelming feeling of isolation is a special attraction, unparalleled in the Winnemucca District. Antelope, deer, cougar, sage grouse and chukar are sometimes found on the edge of the WSA. Beaver and muskrat have been spotted along the Quinn River.

D. Special Features: The Black Rock Desert is one of the largest, virtually undeveloped desert valley floors in the western United States and one of the few which features an intermittent river system. Recent discoveries indicate that this area contains paleonotolgic and archaeologic resources of national importance. These include the remains of a woolly mammoth, a saber-toothed tiger and other Pleistocene animals believed to have been trapped by the marshy shoreline of ancient Lake Lahontan. Many of these paleontologic sites also correspond to major archaeologic finds. These sites are concentrated around the Jackson Creek Slough and the Quinn River in the portion recommended for wilderness.

The Quinn River, which enters the WSA at the northern tip during periods of high runoff, is a superb example of an intermittent river and playa system in a totally undeveloped state.

Two rare plants, the winged milk-vetch (Astragalus petrocarpus) and Barnely wild cabbage (Caulanthus barnebyi), have been reported just outside the WSA boundary and there is a possibility they may be found within the WSA as well. They have been listed as "other rare" by the Nevada Threatened and Endangered Species Workshop which means that they are rare but not under any current threat.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 95,878 acres of Saltbush-Greasewood ecosystem and 223,716 acres of desert where vegetation is largely absent to the National Wilderness Preservation System (NWPS). Presently within the NWPS, three wilderness areas contain the Saltbush-Greasewood ecosystem (Intermountain Sagebrush Province) and none of them are in Nevada. There is only one desert wilderness in the NWPS containing an ecosystem characterized by an absence of vegetation. Since these ecosystems are represented to such a limited extent, adding more areas to the NWPS containing these ecosystems is desirable. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Desert: Vegetation Largely Absent	1	30,245	12	870,403
Saltbush-Greasewood	3	45,553	41	1,156,347
	NEVADA			
Desert: Vegetation Largely Absent	0	0	0	0
Saltbush-Greasewood	0	0	12	367,336

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within five hours drive of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Center	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
Idaho				
Boise	22	937,766	172	5,127,039
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541

C. Balancing the geographic distribution of wilderness areas: The Black Rock Desert WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation would provide the public with wilderness opportunities in an area presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character)

The portion of the Black Rock Desert WSA being recommended for wilderness is considered manageable but there may be difficulties with 142,050 acres of oil and gas leases (none of which involve pre-FLPMA leases) and 15,007 acres of geothermal leases (11,000 acres of which are under pre-FLPMA leases).

Those portions of the WSA that are not being recommended for wilderness are also considered to be manageable. There are 900 acres of unpatented mining claims, 11,846 acres of geothermal leases (600 of which are pre-FLPMA) and 62,869 acres of oil and gas leases.

There would be extensive management problems including but not limited to marking the wilderness boundary on the ground and preventing motorized vehicles from entering the area. Due to the essentially flat and featureless terrain, trying to establish and protect the exact boundary creates many difficulties. Ninety-nine percent of the acreage recommended for wilderness is accessible to off-road vehicles. It is very easy for such vehicles to turn off of the boundary roads and drive cross-country into the desert.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) past and present mining activities and (7) the US Geological Survey/Bureau of Mines Mineral Report. This report was compiled from the results of geologic, geochemical, geophysical and mineral surveys conducted in 1984 and 1985.

As a result of the BLM's information, found in the Wilderness Environmental Statement for the Winnemucca District, the following conclusions were reached: (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 41,500 acres with moderate potential for metallic minerals (tungsten*, molybdenum, barium and mercury*); 295,900 acres with moderate potential for nonmetallic minerals (clay, sodium, potassium and lithium); 62,500 acres of highly favorable land for geothermal steam; 154,600 acres with moderate potential for geothermal steam; and 319,594 acres of highly favorable land for oil and gas. The 62,500 acres of highly favorable land for steam includes most of the Pinto Hot Spring Known Geothermal Area (KGRA) which covers 13 sections. One dry oil and gas well has been drilled in the southeast portion of the WSA.

There are presently 900 acres of mining claims, 26,853 acres of geothermal leases and 204,919 acres of oil and gas leases in the WSA. There is no present production of any mineral, geothermal or oil and gas resources in the WSA.

In summary, quantities of various minerals are unknown, but the potential for occurrence is moderate in several parts of the WSA as identified in the Environmental Impact Statement.

According to the USGS/BM mineral report (Bulletin 1726-E), which covers the portion recommended for wilderness, there is moderate potential for gold, silver and mercury in the northwest corner of the study area, around the hot springs. There is moderate potential, also, for lithium on 86,000 acres. The entire study area has moderate potential for geothermal resources and low potential for oil and gas resources.

Impacts on Resources

The comparative impact table (Table 4), on the next two pages, summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 31 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunities for solitude. These comments addressed the entire 336,000 acres of the original study area. About 16,000 acres have been released from wilderness consideration.

During the 90 day comment period for the draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). Of the eight oral comments that were received, two people supported more wilderness than that recommended in the draft EIS and six people supported the draft EIS. Of the 91 written comments ten people supported more wilderness than recommended in the draft EIS, 61 people supported the recommendation in the document and 20 wanted less.

Several comments mentioned the mineral and geothermal potential, military flights, lack of solitude or recreation opportunities, the difficulty of managing the area and the huge expense of search and rescue efforts on the huge expanse. Others emphasized that this unique and nearly pristine area needs protection from development and cited the area's size, naturalness, wildlife (along the Quinn River), primitive recreation opportunities, scenic qualities and its archeological and paleontologic resources.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Partial Wilderness (Wilderness Emphasis)	No Wilderness
Impacts on Wilderness Values	Wilderness values would be preserved on 219,300 acres. The special features - important paleontologic and archaeologic resources and vast areas of desert - are within this portion. Naturalness would be impaired on approximately 810 acres or less than 1% as a result of increased ORV use and energy and mineral activity. Solitude would be adversely affected on approximately 4% or 5,270 acres from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. The special feature of the undisturbed vastness would be subject to impairment from increased ORV use as would the nationally important paleo and archeo resources that may be there.	Naturalness solitude and primitive recreation would be preserved in the WSA. The special features would receive longterm protection.	Wilderness values would be preserved on 317,734 acres. The special features - the overwhelming vastness and important paleontologic and archaeologic resources would receive long-term protection. Naturalness would be impaired insignificantly. The 100 feet of land around the perimeter offers very limited use. Solitude would be adversely impacted to a very small degree because of the limited opportunities on the narrow strip. Opportunities for primitive recreation would be very little due to the narrowness of the land.	Naturalness would be adversely impaired on approximately 1,370 acres or less than 1% as a result of increased ORV use and energy and mineral activity. Solitude would be adversely impacted on approximately 2% or 7,565 acres from increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. None of the special features would receive long-term protection from ORV use and energy and mineral activity.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	Partial Wilderness (Wilderness Emphasis)	No Wilderness
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected lithium exploration opportunities would be foregone in the area not recommended for wilderness. Projected base-precious metal and lithium exploration and development of 5 small clay pits would be possible in the area not recommended for widerness.	Projected base-precious metal exploration and lithium exploration and development of 5 small clay pits would be foregone.	Same as All Wilderness.	Projected base-precious metal and lithium exploration and development of 5 small clay pits would be possible.
Impacts on the Level of Exploration for Oil and Gas and Geothermal Resources	Geothermal, oil and gas exploration opportunities and 1 oil well pad would foregone in the area recommended for wilderness. Projected geothermal and oil and gas exploration, 1 oil wellpad and development of 2 small geothermal powerplants would be possible in the portion not recommended for wilderness.	Geothermal, oil and gas exploration and 1 oil well pad and development of 2 small geothermal powerplants would be foregone.	Same as All Wilderness.	Projected geothermal, oil and gas exploration and 1 oil well pad and development of 2 small geothermal powerplants would be possible.
Impacts on Motorized Recreational Vehicle Use	700 visitor hours of current ORV use and 1,500 hours of foreseeable future use would be displaced annually from the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the portion not recommended for wilderness, ORV use would not change.	1,200 visitor hours of current ORV use and 2,600 hours of foreseeable future use would be displaced and absorbed on adjacent lands.	950 visitor hours of current ORV use and 2,100 hours of foreseeable future use would be displaced annually from the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 250 visitor hours to 550 hours annually.	ORV use would grow from the current 1,200 visitor hours to 2,600 hours annually.

No comments about wilderness were received from Humboldt County agencies or officials. However, the county's land use plan addresses wilderness designation specifically under Goal 5: "To prevent commonly used areas of Humboldt County from being erroneously designated as 'wilderness or roadless areas'. In addition, Goal 6 states: "To maintain the existing roads and access necessary to the continued economic well being of Humboldt County including the agriculture, livestock, mining and tourist industries as well as to maintain the quality of life in Humboldt County by ensuring access to recreational lands of all kinds including fishing, wildlife, rock-hounding, sightseeing, off road vehicle use, horseback and backpacking use and general enjoyment of the {sic] Nevada's traditional wide open spaces." Humboldt County has over 95% of the WSA within its borders.

Because the terms "commonly used area" and erroneously designated as wilderness" are not defined, it is difficult to determine whether wilderness designation is consistent or inconsistent with Goal 5. Wilderness designation could be both consistent and inconsistent with Goal 6 since wilderness designation would ensure public access for most recreational activities mentioned but close areas to off-road use.

Pershing County, with less than 5% of the WSA and none of the recommended acreage, wants to preserve all public lands within the county's boundaries as multiple use areas. Multiple use was not defined.

In a letter to the Winnemucca District dated December 30, 1983, the Governor of the State of Nevada said, "This is a very controversial area. As an example of playa/valley floor ecosystems it is probably unique amoung WSAs. It would present special management problems because of the difficulty of restricting access to this flat land. The major argument for designation seems to be the need to protect valuable cultural and paleontologic resources which are being damaged by visitors. Humboldt County concurs with the need to protect these resources but feels that some other mechanism would be more appropriate than wilderness designation; they consider the area to be unmanageable as wilderness and oppose wilderness designation strongly. The BLM recently asked an ad hoc committee including local and state interests to examine the problem and come up with a recommendation for the area. The committee recommended limited wilderness designation and that recommendation is reflected in the BLM's preferred alternative. We share Humboldt County's concerns, but are willing to accept the recommendation of the committee and support the preferred alternative. It is important that local and state interests continue to be involved in the creation of a management plan for the area." The letter was in response to the draft Environmental Impact Statement.

The U.S. Air Force said that it supports wilderness designation provided no restrictions are placed on military flights. They said that they would work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

PAHUTE PEAK WILDERNESS STUDY AREA

1. THE STUDY AREA - 57,529 acres

The Pahute Peak WSA (NV-020-621) is located in western Humboldt County, Nevada, about 40 miles northeast of Gerlach. The WSA includes 57,529 acres of public land and surrounds 80 acres of private lands (Table 1).

The boundary for the study area begins at the junction of the Van Vleck Reservoir-Double Hot Springs Road and the North Pahute Peak Road. The boundary heads to the east, following the North Pahute Peak Road, jockeying around private land, until it reaches the South Pahute Meadows Ranch Road. At this point it heads south until the junction of the Slot Road. The boundary then proceeds southwesterly to the Van Vleck Reservoir-Double Hot Springs Road. The boundary goes north to the unnamed road in Section 12 where it follows the road for a little more than a mile to the heavily disturbed portion (mining area) located in Sections 6 and 7. The boundary circles this area and returns to the Van Vleck Reservoir-Double Hot Springs Road. It then returns to the junction of the North Pahute Peak Road, the starting point.

The WSA is about 14 miles long in a northwest-southeast direction and from four to eleven miles wide east to west.

The Pahute Peak WSA straddles a northwest-southeast trending ridge of the central Black Rock Range, flanked on the east and west sides by the Black Rock Desert. Elevations range from 4,050 feet to 8,594 feet.

There are four distinct landforms in the WSA. The high elevation ridge crest in the vicinity of Pahute Peak, the west side of the Black Rock Range, the east side of the Black Rock Range and the fringing desert piedmont.

The high elevation ridge crest in the vicinity of Pahute Peak is an undulating highland with a few lightly cut drainages. It is markedly wetter than surrounding areas and encompasses two large aspen and mountain mahogany stands. Pahute Peak is a nearly flat-topped mountain with a steep southwest facing slope.

The west side of the Black Rock Range is characterized by numerous highly dissected dendritic drainages running perpendicular to the main ridge axis. It has several highly colorful barren areas which resemble "badlands" landscapes (very highly dissected drainages within soft sedimentary topography). It is the most rugged landform in the WSA, with cliff area and steep canyons throughout. This section is within the viewshed of the Applegate-Lassen Emigrant Trail.

The east side of the Black Rock Range is a rolling to moderately steep landform, markedly gentler than the west side. It has several shallow dendritic drainages running perpendicular to the main ridge axis which blend slowly toward the Black Rock Desert on the east.

The fringing desert piedmont, found on both the east and the west sides of the range, gently slopes from the Black Rock Range. It has parallel drainages separated by low ridges, with several alluvial fans on the west side.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement finalized in September, 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative; a partial wilderness alternative where 25,200 acres would be designated as wilderness and 32,329 acres would be released for uses other than wilderness; and a no wilderness alternative, which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - **0 acres recommended for wilderness**
57,529 acres recommended for nonwilderness

The recommendation for this WSA is to release all 57,529 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The recommendation differs from the proposed actions listed in both the Draft and Final Winnemucca Wilderness EISs. Mineral potential identified by the U.S. Geologic Survey and Bureau of Mines, unknown during the EIS studies, was judged significant enough to warrant a change of recommendation from partial wilderness to no wilderness.

The recommendation emphasizes maintaining access to the entire WSA for mineral exploration and extraction. Large portions of the WSA have potential for the occurrence of a diverse group of mineral and energy resources including hardrock locatable minerals and oil, gas and geothermal resources. There is a high potential for geothermal resources in 19,200 acres and moderate potential in 10,700 acres. Oil and gas resources have moderate potential for occurrence in parts of the study area. The recommendation encourages exploration and development of these energy resources.

The U.S. Geologic Survey, in conjunction with the Bureau of Mines, completed a survey of the area originally recommended for wilderness. As a result of that survey, they concluded that there is a zone of high mineral potential for gold and silver deposits along the northwestern portion of the originally recommended area. U.S.G.S. has rated the northern half of their study area as having moderate mineral potential for gold and silver deposits. The southwest portion of the WSA has high potential for geothermal resources. There is low potential for mercury and uranium through out the WSA.

The high and moderate potential for occurrence of a diversity of mineral and energy resources combined with the current interest in the area (800 acres of mining claims and 10,344 acres of oil and gas leases plus increased geothermal interest) is sufficient evidence to conclude that in the future this area could produce significant quantities of important mineral and/or energy resources.

The development and extraction of mineral resources in this WSA would contribute to a reduction of wilderness values. Development of some or all of the 800 acres of claims and 10,344 acres of leases would occur with or without wilderness designation since many of these will have valid existing rights which would precede a wilderness designation. Because the areas with resource potential are so widely dispersed, there was no reasonable alternative that would allow for wilderness designation. It is projected that even after resource exploration much of the area will retain most wilderness characteristics.

A secondary rationale for the recommendation emphasizes maintaining access for nonwilderness recreationists. Much of the lower bajada flats are accessible to ORVs. The western slopes of the Pahute Peak WSA are currently being used as accessways to the base of the mountain range for rock collectors. This region is known throughout the west as having outstanding examples of agates, geodes, opals and petrified wood and vehicle use in conjunction with collecting these specimens has been high. The legend of a lost silver mine in the area also attracts many people.

The recommendation to release the area for uses other than wilderness concurs with the Governor of the State of Nevada's recommendation.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (Surface and subsurface)	57,529
Split Estate (BLM surface only)	0
Inholdings (State, Private)	80
Total	57,609
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	57,529
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	57,529
Inholdings (State, Private)	80

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

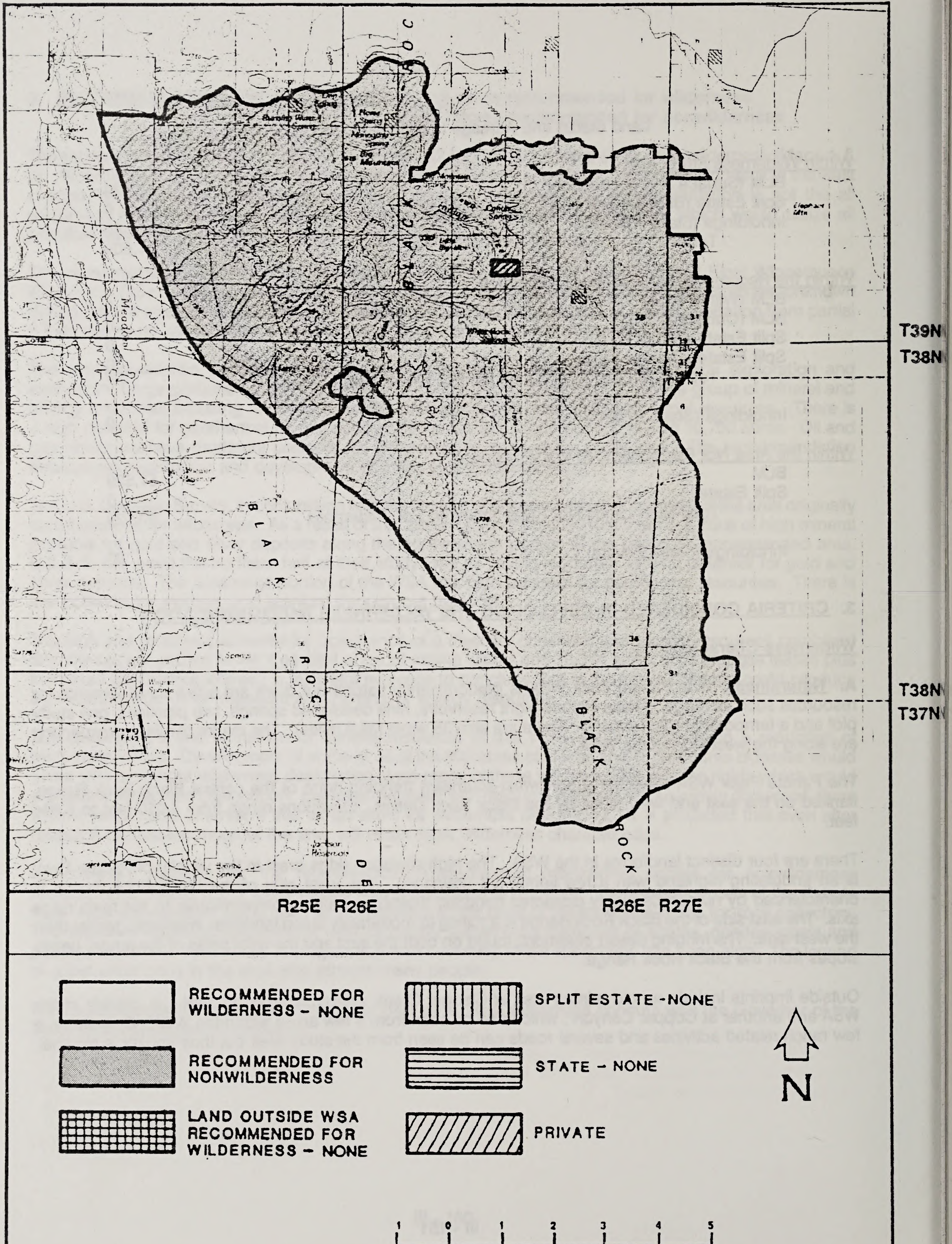
Wilderness Characteristics

A. **Naturalness:** The Pahute Peak WSA is predominantly natural but there are a few developments for resources such as range. These include eight reservoirs, nine developed springs, two pipelines, one study plot and a temporary radio repeater. There are also 35 ways (34.8 miles). The marks of minor prospecting are along the west side of the WSA.

The Pahute Peak WSA straddles a northwest-southeast trending ridge of the central Black Rock Range, flanked on the east and west sides by the Black Rock Desert. Elevations range from 4,050 feet to 8,594 feet.

There are four distinct landforms in the WSA. The high elevation ridge crest in the vicinity of Pahute Peak is an undulating highland with a few lightly cut drainages. The west side of the Black Rock Range is characterized by numerous highly dissected dendritic drainages running perpendicular to the main ridge axis. The east side of the Black Rock Range is a rolling to moderately steep landform, markedly gentler than the west side. The fringing desert piedmont, found on both the east and the west sides of the range, gently slopes from the Black Rock Range.

Outside imprints include an old mining area at Clapper Creek, cherrystemmed so that it is outside of the WSA and another at Copper Canyon , which can be seen from a few areas within the WSA. One ranch, a few ranch related activities and several roads can be seen from the study area but their impact is minimal.



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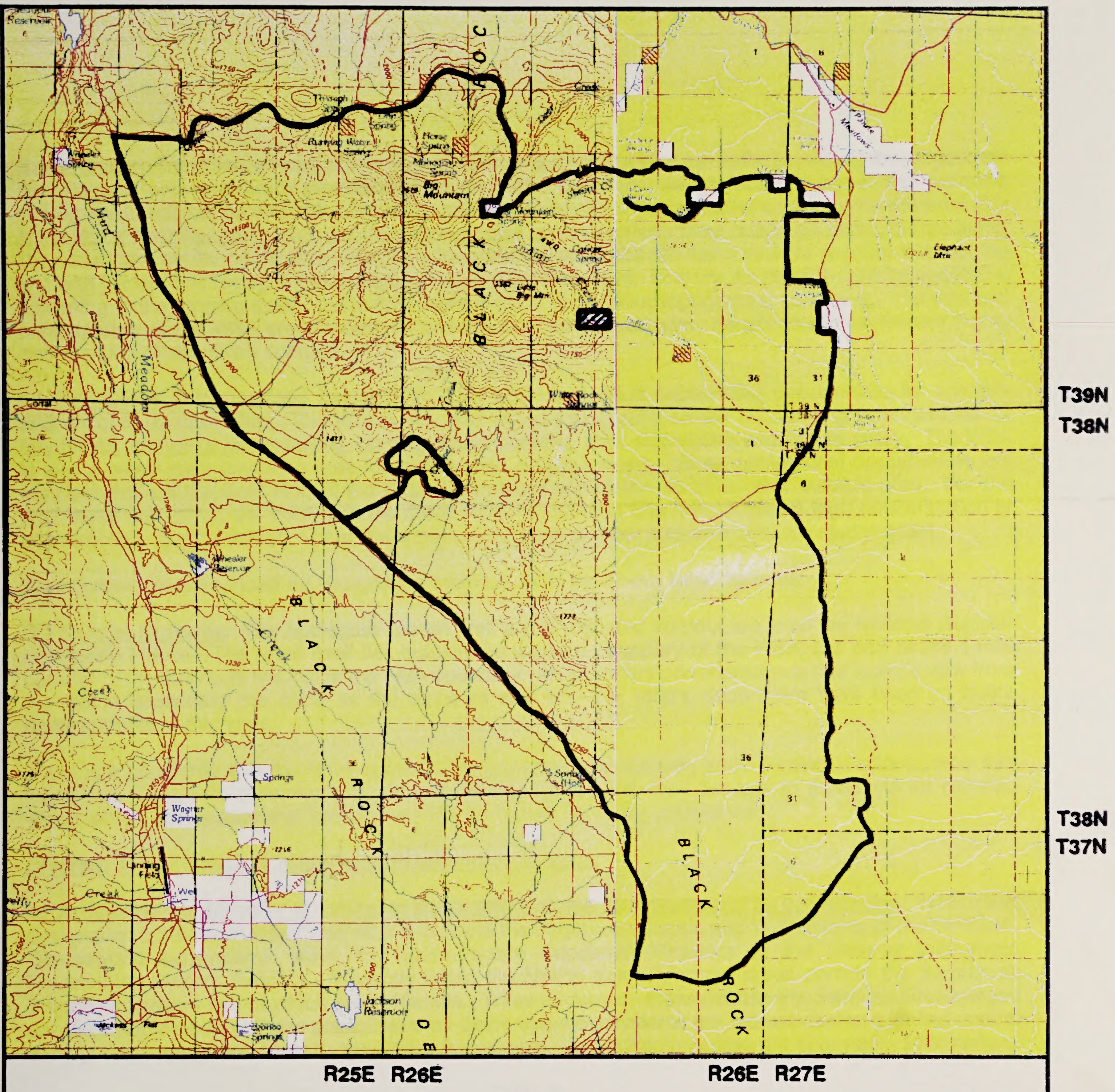

▒	RECOMMENDED FOR WILDERNESS – NONE	▥	SPLIT ESTATE -NONE
☐	RECOMMENDED FOR NONWILDERNESS	▤	STATE – NONE
▦	LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE	▨	PRIVATE

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B. Solitude: The Pahute Peak WSA offers outstanding opportunities for solitude. Along the ridge crest near Pahute Peak, low shrubs provide minimal vegetative screening, except locally in aspen and mountain mahogany stands on the east side. While low shrubs provide minimal vegetative screening on the west side of the Black Rock Range, there is excellent topographic screening throughout due to the dissected landform. The situation is similar on the east side of the Range with low shrubs providing minimal vegetative screening and with fair to good topographic screening in the major drainages. Low shrubs provide minimal vegetative screening in the fringing desert piedmont where there is fair to poor topographic screening. The size and configuration of the WSA are sufficient to provide outstanding solitude. Regular low-level military flights occasionally diminish this solitude.

C. Primitive and Unconfined Recreation: This study area offers outstanding opportunities for primitive and unconfined recreation. The WSA's size and varied topography create outstanding opportunities for day-hiking, camping, backpacking, hunting, horse-packing, rock scrambling and nature study, The WSA is also a major rock hounding area for geodes and petrified wood. These recreational opportunities are concentrated on the west side of the WSA within the preliminarily recommended suitable area. For the wild horse enthusiast, the WSA is in the Black Rock Wild Horse Use Area, where a high concentration of such animals may be found. Other large mammals, such as deer and antelope, are also present.

That portion recommended for designation includes all of the above listed features.

D. Special Features: The Applegate-Lassen Trail and designated corridor are is on the National Register of Historic Places. The route itself lies outside the western boundary of the WSA, but part of the 1-mile corridor of the trail route lies inside the WSA boundary. An important consideration is that today's view from the trail is essentially the same as the pioneers saw it in the 1850's since there have been no major developments in this area.

There is a possibility that the WSA contains the grave of Peter Lassen, early Western explorer, who was killed here along with a companion. One of the two bodies was later brought to Susanville for reburial, which leaves speculation that Lassen may still be buried out there someplace..

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 46,023 acres of the Sagebrush Steppe and 11,506 acres of the Saltbush-Greasewood ecosystems within the Intermountain Sagebrush Province to the National Wilderness Preservation System (NWPS). Presently within the NWPS four wilderness areas contain the Sagebrush Steppe ecosystem two of which are in Nevada. Three wilderness areas contain the Saltbush-Greasewood ecosystem and none of these are in Nevada. Since these ecosystems are represented to a limited extent, adding areas containing them to the NWPS is desirable. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
NATION WIDE				
Intermountain Sagebrush Province/				
Saltbush-Greasewood	3	45,553	41	1,156,347
Sagebrush Steppe	4	131,199	136	4,356,340
NEVADA				
Saltbush-Greasewood	0	0	12	367,336
Sagebrush Steppe	2	86,907	33	1,469,316

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is a five hour drive away from five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Center	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039
Oregon				
Medford	31	2,440,081	21	730,038

C. Balancing the geographic distribution of wilderness areas: The Pahute Peak WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The WSA is capable of being managed as wilderness. There would be manageability concerns dealing with the 80 acres of private land, the approximately 800 acres of mining claims, 10,334 acres of oil and gas leases (no surface occupancy stipulation) and the 1.5 miles of roads present. There would also be management concerns dealing with the 17,000 acres of ORV accessible land.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) past and present mining activities and (7) the U.S. Geological Survey (U.S.G.S.) Mineral Report. The USGS report was compiled from the results of geologic, geochemical, geophysical and mineral surveys conducted in 1984 and 1985.

As a result of this information the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 13,400 acres rated as having moderate metallic mineral potential (uranium, molybdenum, copper*, nickel*); 13,800 acres rated as having moderate potential for nonmetallic minerals (fluorspar*, opal); 19,200 acres rated high for geothermal potential; 10,700 acres rated moderate for geothermal potential; and 10,700 acres rated moderate for oil and gas potential. Less than 100 acres of the Double Hot Spring Known Geothermal Resource Area (KGRA) occur within the Pahute Peak Wilderness Study Area. Considerable underground workings occur on portions of 20 mining claims on the northern boundary. Both fluorspar and uranium mineralization have been reported on 12 mining claims. Some prospecting activities, apparently for opals, have occurred on six mining claims within a cherrystem area of the WSA.

There are 800 acres of mining claims and 10,344 acres of oil and gas leases in the WSA. There is no present production of any mineral, geothermal or oil and gas resources in the study area.

The U.S. Geologic Survey, in conjunction with the Bureau of Mines, completed a survey of the area originally recommended for wilderness. As a result of that survey, they concluded that there is a zone of high mineral potential for gold and silver deposits along the northwestern portion of the originally recommended area. In addition, the U.S.G.S. has rated the northern half of their study area as having moderate mineral potential for gold and silver deposits. The southwest part of the WSA has high potential for geothermal resources. There is low potential through out the WSA for mercury and uranium.

In summary, quantities of various minerals or resources are unknown, but the potential for occurrence is from moderate to high in various parts of the WSA, as identified in the Environmental Impact Statement and the USGS report.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects of pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4

Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Partial Wilderness Alternative
Impacts on Wilderness Values	Naturalness would be impaired on approximately 15% or 8,640 acres as a result of increases ORV use, energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on approximately 1% or 680 acres as a result of increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation. None of the special features would receive long-term protection from ORV use, energy and mineral activity or vegetative manipulation.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA except for 300 acres of valid discoveries near Copper Canyon. The special features would receive long-term protection.	Wilderness values would be preserved on 25,200 acres except for 300 acres of valid discoveries near Copper Canyon. The special features - Big Mountain, Indian Creek and Applegate-Lassen Trail Viewshed - are within this portion. Naturalness would be impaired on approximately 10% or 6,025 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation. Solitude would be adversely impacted on approximately 1% or 325 acres from increased ORV use, energy and mineral activity and vegetative manipulation. Opportunities for primitive recreation would be decreased by the same activities.
Impacts on Range Condition	The proposed vegetative manipulation project would result in an improvement in range conditions on 320 acres.	Approximately 320 acres proposed for vegetative manipulation would not be treated and range condition would not change.	Approximately 320 acres proposed for vegetative manipulation would not be treated and range condition would not change.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Partial Wilderness Alternative
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal and nonmetallic mineral exploration and development of 1 large open pit precious metal mine would be possible.	Projected base-precious metal and nonmetallic mineral exploration opportunities would be foregone. The projected development of 1 large open pit precious metal mine would be possible due to valid discoveries on claims pre-dating the wilderness designation.	Projected base-precious metal and nonmetallic mineral exploration opportunities would be foregone in the area recommended for wilderness. The projected development of 1 large open pit precious metal mine, partially within the area recommended for wilderness, would be allowed due to valid discoveries on claims pre-dating the wilderness designation. Projected base-precious metal exploration and development of 1 large open pit precious metal mine, partially within the area not recommended for wilderness, would be possible.
Impacts on the Level of Exploration for Oil and Gas and Geothermal Resources	Projected geothermal and oil and gas exploration opportunities outside of the Applegate-Lassen Trail Viewshed would be allowed.	Geothermal and oil and gas exploration opportunities would be foregone.	No energy exploration development is allowed in the area recommended for wilderness due to current development restrictions within the Applegate-Lassen Trail Viewshed. Projected geothermal and oil and gas exploration opportunities would be allowed in the area not recommended for wilderness.
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the current 400 visitor hours to 900 hours annually.	400 visitor hours of current ORV use and 900 hours of foreseeable future use would be displaced annually. This use would be absorbed on adjacent lands.	40 visitor hours of current ORV use and 90 hours of foreseeable future use would be foregone annually in the area recommended for wilderness. This use would be absorbed on adjacent lands. In the portion not recommended for wilderness, ORV use would grow from the current 360 visitor hours to 800 hours annually.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 22 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were: other resource values, roads, intrusions and lack of outstanding opportunities for solitude.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). A total of four oral comments were received that supported more wilderness than that originally recommended in the draft EIS (the original 31,000 acre recommendation). Of the 101 written comments, 56 people wanted more wilderness than that recommended in the draft EIS (31,000 acres), 23 supported the proposed action and 22 supported less wilderness.

Most of those opposing wilderness designation are rock hounders. All known rock hounding areas were excluded during the study process and are not now in the portion recommended for designation. Other people wrote of the need to save the desirable scenery, the riparian areas, wildlife and bird habitat.

No comments were received from Humboldt County agencies or officials. However, Humboldt County's land use plan goals address wilderness designation specifically under Goal 5: "To prevent commonly used areas of Humboldt County from being erroneously designated as 'wilderness' or roadless areas" In addition, Goal 6 states, "To maintain the existing roads and access necessary to the continued economic well being of Humboldt County including the agriculture, livestock, mining and tourist industries as well as to maintain the quality of life in Humboldt County by ensuring access to recreational lands of all kinds including fishing, wildlife, rock-hounding, sightseeing, off-road vehicle use, horse back and horse packing use and general enjoyment of the [sic] Nevada's traditional wide open spaces.

Since the terms "commonly used areas" and "erroneously designated as wilderness" are not defined, it is difficult to determine whether wilderness designation is consistent or inconsistent with Goal 5. Wilderness designation could be both consistent and inconsistent with Goal 6 since such designation would ensure public access for most recreational activities mentioned but close areas to off-road vehicles.

In a letter to the Winnemucca District Dated December 30, 1983, the Governor of the State of Nevada said, "The wilderness values in this area are rather limited, and there are considerable geothermal and mineral conflicts. Advocates of the protection of the historic emigrants trails would like to see this area protected because it is in part of "viewshed" [sic] of the Applegate-Lassen trail to the west. We concur with the desirability of protecting emigrant trails, but feel that the protection of a partial viewshed is not in itself enough reason to designate this a wilderness area. The State would prefer that this area be dropped from further consideration." This letter was in response to the Draft Wilderness Environmental Impact Statement.

A consistency letter from the Governor (July 12, 1984) thanked the BLM for following their suggestions in the December 30 consensus letter on three of the five WSAs on which there was disagreement. The Governor then said," Based upon the information available to us at this time, we will not protest the recommendations of the PFEIS under the Governor's consistency review provisions of your Planning Regulations....We will continue to study the resources and needs of these areas, and look forward to continuing to work with you on the consideration of wilderness."

The U.S. Air Force said it supported wilderness designation as long as it did not interfere with military flights. It said it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

NORTH BLACK ROCK RANGE WILDERNESS STUDY AREA

1. THE STUDY AREA - 30,191 acres

The North Black Rock Range (NV-020-622) is located in northwest Nevada in Humboldt County, about a 4-hour drive northeast from Reno. The WSA includes 30,191 acres of public lands and surrounds eight privately owned inholdings totaling 715 acres (Table 1).

The WSA is bounded on the northwest by the Summit Lake Indian Reservation, the northeast by Snow Creek and Summer Camp Canyon Roads, on the east by the West Side of the East Arm of The Black Rock Desert Road and private lands, on the south by the Paiute Windmill and the White Rock Canyon-Slumgullion Creek Roads and on the west by private lands and the Summit Lake Indian Reservation Road. It encompasses the northern portion of the Black Rock Range between Slumgullion Creek and the southern boundaries of the Summit Lake Indian Reservation and the Lahontan Cutthroat Trout Natural Area Instant Study Area (ISA). (See Lahontan Cutthroat ISA WSR).

The northern portion of the area has two large canyons that extend westward from a north-south trending ridge. The southern half of the WSA includes a landscape of numerous low-lying basalt buttes and shallow drainages. Elevations range from 4,800 feet on the western boundary to 8,400 feet at the major ridgeline.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement finalized in September, 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 10,700 acres would be designated as wilderness and 20,091 acres would be released for uses other than wilderness, and a no wilderness alternative, which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - **0 acres recommended for wilderness**
30,191 acres recommended for nonwilderness

The recommendation for this WSA is to release all 30,191 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The WSA has been recommended for uses other than wilderness because of mineral resource potential and manageability concerns. There are 13,300 acres of land with moderate metallic mineral potential and high potential for geothermal steam. There are no oil and gas leases, geothermal leases or mining claims in the WSA.

Short-term metallic mineral exploration/development is likely within the WSA. This interest would cause cross-country travel, drill pads, three miles of drill roads and open cuts disturbing a total of 10 acres.

Interest in proposed geothermal developments are increasing in the surrounding areas. This interest would result in the development of a five megawatt wellhead generator with associated well pads, one mile of access road and a power line disturbing 10 acres. Geothermal exploration would consist of cross-country travel, small drill sites, and 1/2 mile of access road disturbing 5 acres.

The primary management concerns focus on the 715 acres of private inholdings. The proximity of these parcels to the portion of the WSA with the highest wilderness values complicates the management of the entire WSA. Since the BLM is required to provide reasonable access to inholding owners, construction of access roads through the area would be an additional erosion of wilderness values.

In summary, because of moderate mineral and high geothermal potential and management problems presented by private inholdings, the recommendation for this WSA is to not designate it as wilderness.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	30,191
Split Estate (BLM surface only)	0
Inholdings (State, private)	715
Total	30,906
Within the recommended wilderness boundary	
BLM (within WSA)	0
BLM (outside WSA)	0
Split Estate (within WSA)	0
Split Estate (outside WSA)	0
Total BLM Land Recommended for Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	30,191
Split Estate	0
Total BLM land not recommended for Wilderness	30,191
Inholdings (State, Private)	715

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

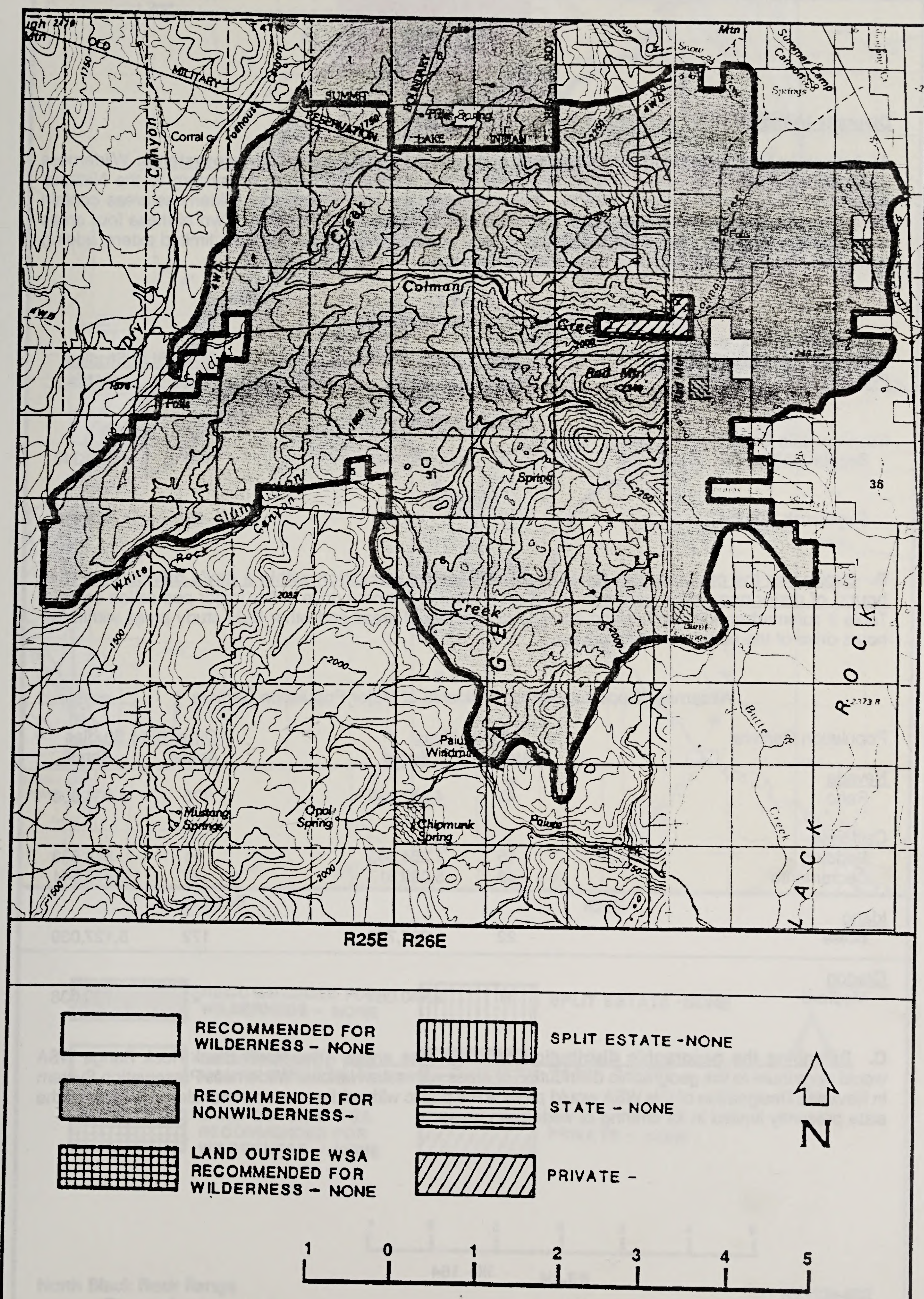
Wilderness Characteristics

A. Naturalness: The North Black Rock Range is predominantly natural. The northern portion of the area has two large canyons that extend westward from a north-south trending ridge. The southern half of the WSA includes a landscape of numerous low-lying basalt buttes and shallow drainages. Elevations range from 4,800 feet on the western boundary to 8,400 feet at the major ridgeline. Manmade features are one small reservoir, two charcos (small pit reservoirs), two developed springs, one fence and four miles of vehicle ways.

B. Solitude: The North Black Rock Range WSA offers outstanding opportunities for solitude. Topographic and vegetative screening are excellent within the northeast quarter of the WSA and fair to poor elsewhere. However, the large size and relative lack of development in the area allow for good solitude. Military flights detract from solitude within the entire WSA.

C. Primitive and Unconfined Recreation: The WSA offers outstanding opportunities for primitive and unconfined recreation, with attractions such as the scenic headwaters of Colman and Soldier Creeks, interesting geologic formations and wild horses. These creeks also provide important riparian habitat and offer fresh drinking water for wildlife. Day-hiking, camping, backpacking, horse-packing and nature study opportunities are considered outstanding. Hunting opportunities are good with game species that include deer, antelope, chukar, sage grouse, cougar and valley quail. There is extensive riparian vegetation to support several of these species.

D. Special Features: A group of prehistoric hunting blinds is present within the WSA. Indians would hide behind them waiting for game to appear.



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Diversity in the National Wilderness Preservation System

A. **Assessing the diversity of natural systems and features as represented by ecosystems**: Wilderness designation of this WSA would add 30,191 acres of the Sagebrush Steppe ecosystem to the National Wilderness Preservation System (NWPS). Presently within the NWPS, only four wilderness areas contain the Sagebrush Steppe ecosystem within the Intermountain Sagebrush Province. Two of these four areas are in Nevada (Table 2). Since the Sagebrush Steppe ecosystem is represented in a limited extent, adding more areas to the NWPS with this ecosystem is desirable.

Table 2
Ecosystem Representation

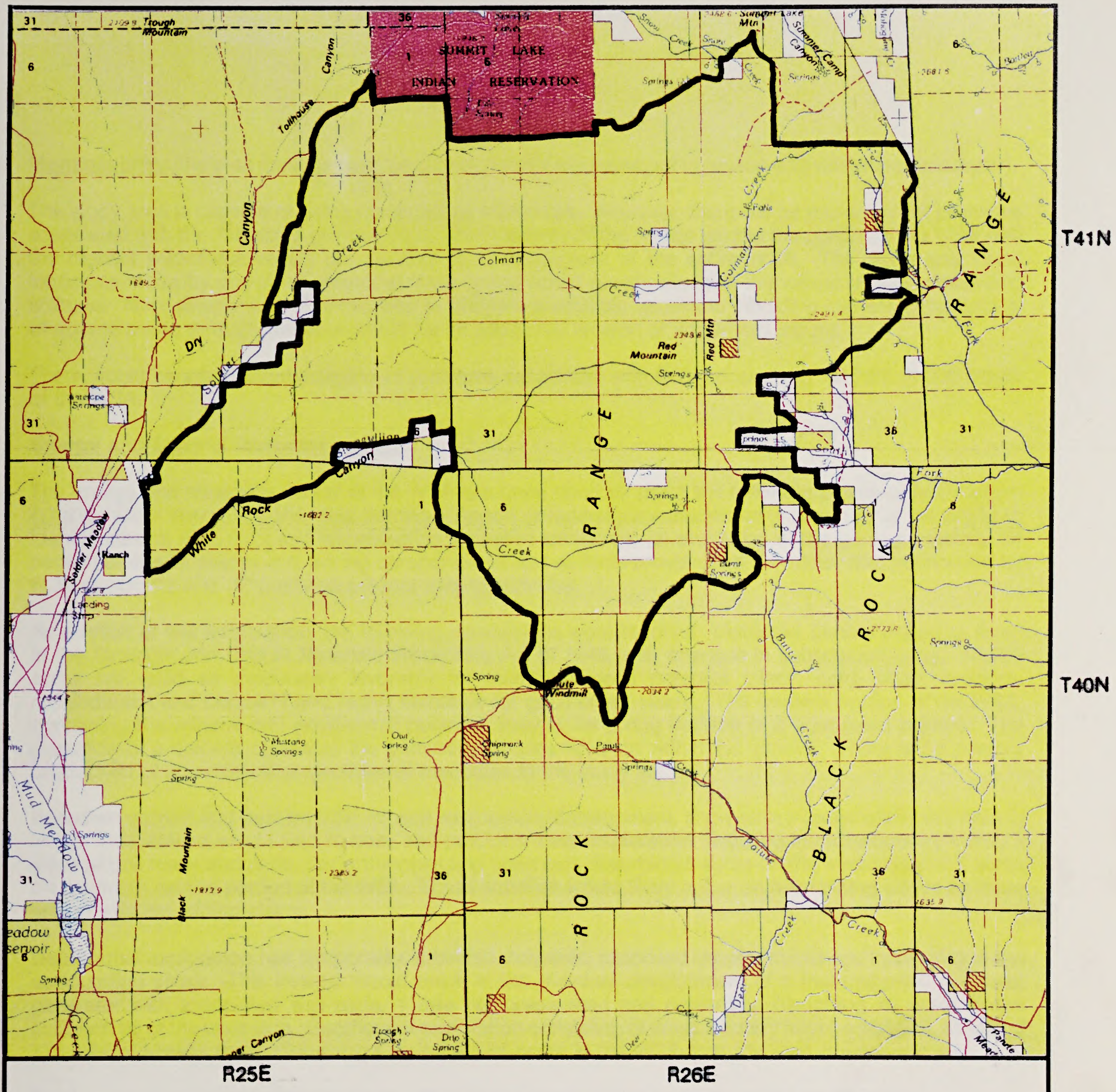
Bailey-Kuchler Classification Province/PNV	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	2	86,907	33	1,469,316

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers**: The WSA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of the population center.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039
Oregon				
Medford	31	2,440,081	21	730,038

C. **Balancing the geographic distribution of wilderness areas**: The North Black Rock Range WSA would contribute to the geographic distribution of areas within the National Wilderness Preservation System in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.



▨ RECOMMENDED FOR WILDERNESS – NONE

☐ RECOMMENDED FOR NONWILDERNESS–NONE

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE

▥ SPLIT ESTATE –NONE

▤ STATE – NONE

▨ PRIVATE – NONE

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North Black Rock Range Proposal

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Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The study area is capable of being managed as wilderness. However, there will be management problems associated with the 715 acres of inholdings. The proximity of the private land to the portion of the WSA with the highest wilderness values complicates the management of the entire WSA. The noise and visual intrusions made by any development of these lands would greatly diminish the values of naturalness and solitude. Also, since the BLM is required to provide reasonable access to inholding owners, construction of access roads through the area would be an additional erosion of wilderness values.

There would be additional management problems associated with ORV accessibility on 29% (9,000 acres) of the WSA.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent acts): 13,300 acres are rated as moderately favorable for metallic mineral potential (zinc*, gold, silver, uranium, molybdenum and copper*) and highly favorable for geothermal steam. The western portion of the WSA, containing the mineral and geothermal potential, may lie on a ring fracture of a postulated caldera. The presence of a caldera enhances the possibility of mineralization within the vicinity. There is no present production of any mineral or geothermal resources in the study area.

Based on current and past metallic mineral exploration/development, short-term interest within the WSA is likely. This interest would lead to base and precious metal exploration, resulting in cross-country travel, 3 miles of drill roads and pads, dozer trenches and open cuts disturbing 5 acres on the west side and 5 acres on the south central portion of the WSA. These activities would likely occur on new mining claims as there are no existing mining claims.

Geothermal exploration has temporarily subsided, however, proposed developments are increasing in the surrounding areas. This interest would result in the eventual development of a five megawatt wellhead generator with associated well pads, 1 mile of access road and power line disturbing 10 acres in the southern tip of the west side. Geothermal exploration consisting of cross-country travel, small drill, sites and 1/2 mile of access roads disturbing 5 acres would occur in the WSA near the west boundary road.

Total acres of projected disturbance resulting from energy/mineral activity would be 25 acres.

There are no mining claims or oil and gas leases in the WSA.

In summary, quantities of various mineral and energy resources are unknown, but the potential for occurrence is from moderate to high in a portion of the WSA.

Impacts on Resources

The comparative impact table (Table 4), summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)
Impacts on Wilderness Values	None of the 30,791 acres would receive long-term protection.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA. The special features - Red Mountain, Coleman and Soldier Creeks and the Lahontan Cutthroat Trout Natural Area - would receive long term protection.	Area Recommended For Wilderness: Wilderness values would be preserved on 10,700 acres. The special features - Red Mountain, Coleman Creek and Lahontan Cutthroat Trout Natural Area - are within the suitable portion.
-Naturalness	Naturalness would be impaired on approximately 42% or 12,895 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.		Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 39% or 7,780 acres as a result of increased ORV use, surface disturbance from energy and mineral activity and vegetative manipulation.
-Solitude	Solitude would be adversely impacted on approximately 1% or 425 acres from increased ORV use, energy and mineral activity and vegetative manipulation.		Solitude would be adversely impacted on approximately 2% or 425 acres from increased ORV use, energy and mineral activity and vegetative manipulation.
-PrimitiveRecreation	Opportunities for primitive recreation would be decreased due to increased ORV use, energy and mineral activity and vegetative manipulation.		Opportunities for primitive recreation would be reduced due to increased ORV use, energy and mineral activity and vegetative manipulation.
-Special Features	None of the special features would receive long-term protection.		None of the special features are in the area not recommended for wilderness.
Impacts on the Level of Exploration for and Development of Geothermal Resources	Projected geothermal exploration and development of 1 small geothermal wellhead generator would be possible.	Geothermal exploration and development of 1 small geothermal wellhead generator would be foregone.	No energy exploration or development is expected in the area recommended for wilderness.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected precious metal exploration opportunities would be possible.	Projected precious metal exploration opportunities would be foregone.	No mineral exploration or development is expected in the portion recommended for wilderness. Projected precious metal exploration opportunities would be possible in the area not recommended for wilderness.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Wilderness Emphasis (Partial Wilderness)
Impacts on Motorized Recreational Vehicle Use	ORV use would growth from the current 100 visitor hours to 220 hours annually.	100 visitor hours of current ORV use and 220 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.	10 visitor hours of current ORV use and 20 hours of foreseeable future use would be displaced annually from the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 90 visitor hours to 200 hours annually.
Impacts on Range Condition	The proposed vegetative manipulation project would result in improvement in range condition on 5,870 acres.	Approximately 5,870 acres proposed for vegetative manipulation would not be treated and range condition would not improve.	Approximately 1,920 acres of proposed vegetative manipulation would not be treated and range conditions would not change.

Local Social and Economic Considerations

Social and economic considerations were not considered to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980) many of the 20 comments received discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status include the following: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunities for solitude. These comments address 90,880 acres of the original area under study. Approximately 60,000 acres of it were released from wilderness consideration for not meeting the basic criteria.

During the 90-day comment period for the Draft Wilderness Environmental Impact Statement, three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983). A total of 87 comments were received. Of these eight were oral and 79 were written. All of the oral comments supported more wilderness than the Proposed Action (No Wilderness) while 61 of the written comments were along the same line. Eighteen of the written comments supported the Proposed Action. Although most of these comments were from rockhounds, it is not clear if they were aware that the Proposed Action recommended no wilderness since they continued to write letters opposing any designation. Most of their letters were general in nature, opposing any wilderness and listing several areas with little, if any, specifics.

No comments about wilderness were received from Humboldt County agencies or officials. However, the county's land use plan addresses wilderness designation specifically under Goal 5: "To prevent commonly used areas of Humboldt County from being erroneously designated as "wilderness" or "roadless areas". In addition, Goal 6 states: "To maintain the existing roads and access necessary to the continued economic well being of Humboldt County including the agriculture, livestock, mining and tourist industries as well as to maintain the quality of life in Humboldt County by ensuring access to recreational lands of all kinds including fishing, wildlife, rock-hounding, sight-seeing, off road vehicle use, horseback and back packing use and general enjoyment of the [sic] Nevada's traditional wide open spaces."

Because the terms "commonly used areas" and "erroneously designated as wilderness" are not defined, it is difficult to determine whether wilderness designation is consistent or inconsistent with Goal 5. Wilderness designation could be both consistent and inconsistent with Goal 6 since wilderness designation would ensure public access for most recreational activities mentioned but close areas to off-road vehicle use.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "There are parts of this area with high wilderness values, but they are small and adversely affected by private inholdings, and by mineral and geothermal potential. We concur that it should be dropped from further consideration." This letter was in response to the Draft Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions area placed on military flights. It also said that it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

NORTH FORK OF THE LITTLE HUMBOLDT RIVER WILDERNESS STUDY AREA

1. THE STUDY AREA - 69,683 acres

The North Fork of the Little Humboldt River WSA (NV-020-827) is located in north-central Nevada, in northeastern Humboldt County. The WSA includes 69,683 acres of public lands and surrounds 80 acres of private inholdings (Table 1).

The northern boundary is a natural gas pipeline. Where the pipeline meets the Button Lake Road, the WSA boundary heads to the southeast along this road until it reaches the road that goes west at the northern edge of Button Lake. The border follows this road, first to the west and then to the south until it reaches the private land located in T.42 N., R.44 E., Section 20. The boundary follows the break between private and public lands in a large, generally "U" shape until the Whiskey Springs Canyon Road is reached. The boundary then proceeds north to the natural gas pipeline, jockeying around some private land just before it meets the pipeline. The area is an irregular elongated shape and measures approximately 19 miles north-south and from 3 to 9 miles east-west.

The study area lies within the central Little Owyhee Desert and straddles 14 miles of the North Fork of the Little Humboldt River Gorge. The area is a high, Great Basin desert landscape with gently rolling to flat terrain and shallow-cut drainages and rounded ridge tops. The uniform desert landscape is interrupted by a deeply-cut river gorge that runs north-south through the study area. The gorge is over 700 feet deep in places.

Vegetation throughout most of the study area is low growing sagebrush with scattered big sagebrush flats. The gorge supports lush riparian vegetation with willow, red osier dogwood, tamarisk and native grasses. Elevations range from 4,700 to 6,000 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative; a partial wilderness alternative where 8,900 acres would be designated as wilderness and 60,783 acres would be released for uses other than wilderness, which is the recommendation in this report; and a no wilderness alternative.

2. RECOMMENDATION AND RATIONALE - 8,900 acres recommended for wilderness 60,783 acres recommended for nonwilderness

The recommendation for this report is to designate 8,900 acres as wilderness and to release 60,783 acres for uses other than wilderness (Maps 1 & 2). All Wilderness is considered to be the environmentally preferred alternative as it would result in the least change in the natural environment over the long-term. The partial wilderness alternative, the recommendation of this report, would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The recommended portion is essentially the river gorge, with a slight setback from the cliffs. This area includes a substantially natural landscape nearly void of human imprints or improvements and outstanding opportunities for primitive recreation, including day-hiking, camping, backpacking, hunting, horse-packing, rock climbing and nature study. The isolation and the scenic beauty of the gorge offer outstanding recreation experiences to the visitor. There are also outstanding opportunities for solitude provided by the excellent topographic screening. This recommendation would designate as wilderness a perennial stream with its associated riparian habitat, a feature uncommon in Nevada. It would also help to protect two plants listed as sensitive on the Nevada Native Plant Society list. This portion of the WSA could reasonably be managed as wilderness.

The areas not recommended for wilderness include most of the WSA outside of the river gorge. This includes areas of low wilderness values, traditional ORV use and moderate geothermal potential. Due to the extremely low use this area receives, most of the WSA would retain the natural values that it does contain.

The northern and western sections are flat to rolling plateaus, almost completely accessible to off-road vehicles. The western portion also has an 80-acre parcel of private land and three cherrystemmed roads. The wilderness values for this portion are not as high as those located in the gorge. These values are of a different character than the gorge. There is the flat rolling landscape as compared to the deep cutting effect of the gorge.

According to the BLM's Final Wilderness Environmental Impact Statement for the Winnemucca District, short-term metallic mineral exploration/development is likely within the portion not recommended for wilderness. This interest would cause cross-country travel, drill pads, an access road, dozer trenches and open cuts disturbing a total of 5 acres.

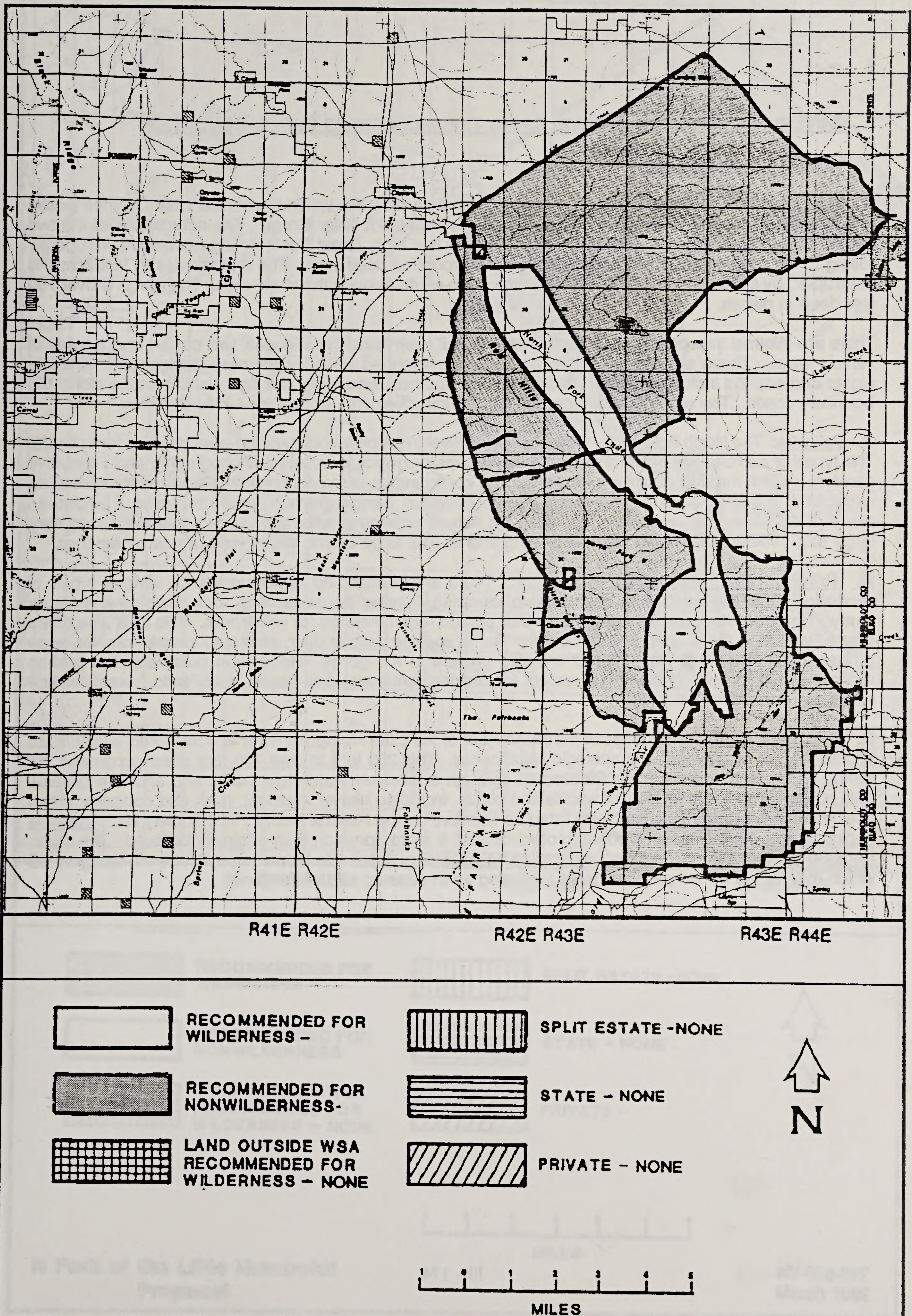
There is a potential demand for geothermal waters. It was felt that the option to keep these waters, which are located in the southeastern portion of the WSA, available for use should remain open. This interest would result in exploration in the area recommended for nonwilderness, consisting of cross-country travel, small drill sites and 1/2 mile of access road disturbing 5 acres.

According to the US Geological Survey/Bureau of Mines Mineral Report, a portion of the recommended area (1,900 acres) has low mineral potential; the remainder has none. It also states that there is no potential for oil and gas and that the potential for geothermal resources is unknown.

The southern area that is recommended for nonwilderness is adjacent to large tracts of private land, including one cattle ranch. About one-third of it is accessible to off-road vehicles. A cherrystem road from the south nearly bisects this portion.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	69,683
Split Estate (BLM surface only)	0
Inholdings (State, Private)	80
Total	69,763
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	8,900
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended For Wilderness	8,900
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	60,783
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	60,783
Inholdings	80



☐ RECOMMENDED FOR WILDERNESS -

▨ RECOMMENDED FOR NONWILDERNESS-

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE

▥ SPLIT ESTATE -NONE

▤ STATE – NONE

▧ PRIVATE – NONE

N Fork of the Little Humboldt Proposal

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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

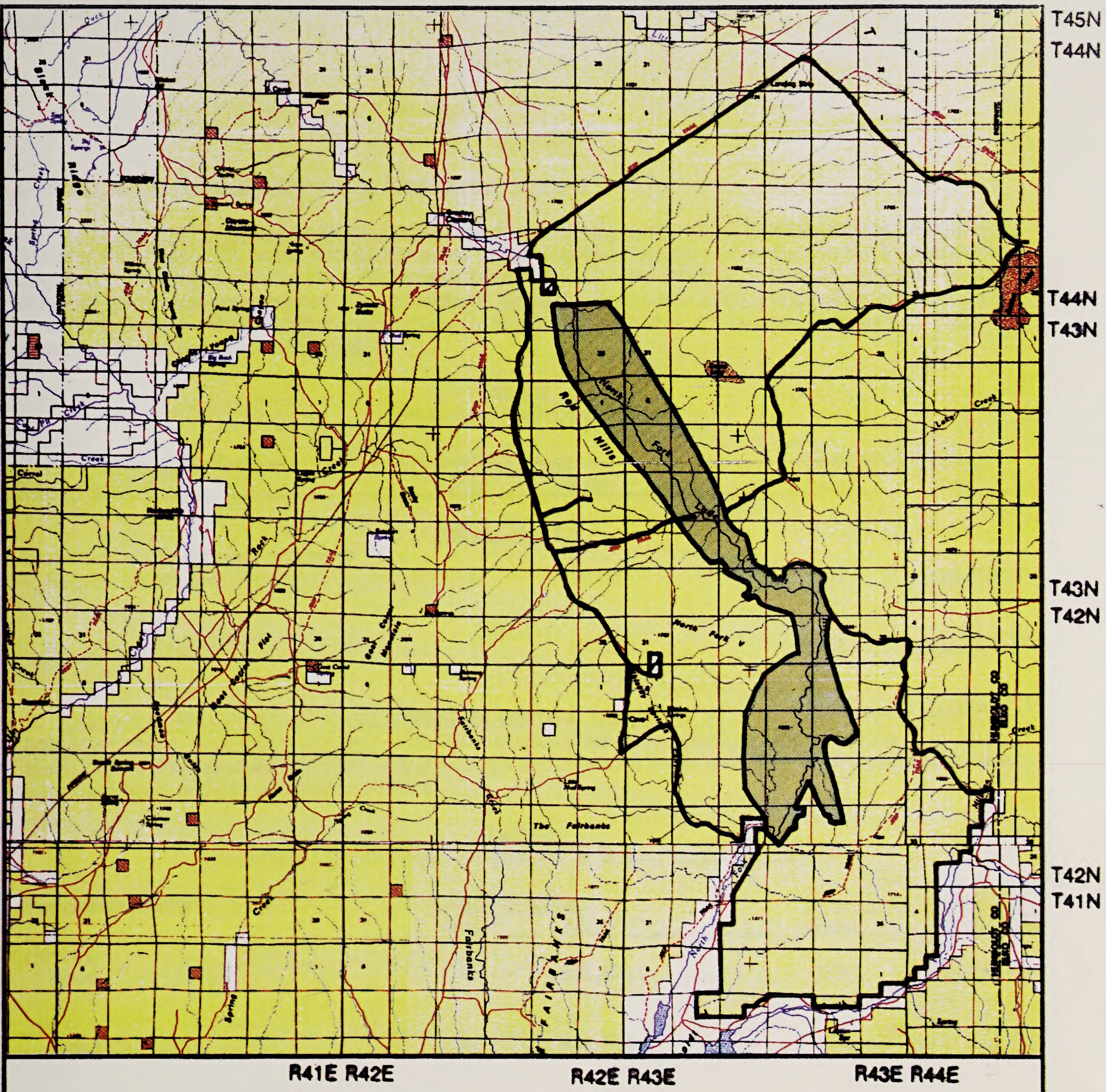
A. **Naturalness:** The WSA is primarily natural. The study area lies within the central Little Owyhee Desert and straddles 14 miles of the North Fork of the Little Humboldt River Gorge. The naturalness of the two major geologic features are quite different. The area is a high, Great Basin desert landscape with gently rolling to flat terrain and shallow-cut drainages and rounded ridge tops. The uniform desert landscape is interrupted by a deeply-cut river gorge that runs north-south through the study area. The gorge is over 700 feet deep in places.

There are minimal improvements, including eight small reservoirs, three fences, two corrals and 8 miles of vehicle ways. These are located in the portion recommended for nonwilderness designation. Outside sights and sounds include ranches visible from the southern boundary and light vehicle traffic along the boundary roads. The recommended portion has no improvements except for 1-mile of a way.

B. **Solitude:** The North Fork of the Little Humboldt River WSA offers outstanding opportunities for solitude. The types of solitude are different between the two major geologic features. Topographic and vegetative screening within the river gorge are excellent. The configuration of the canyon lends itself to high screening capabilities due to its winding nature and close confinement, being extremely narrow in places. The plateau areas to the north and west, although lacking in natural screening, offer fair to good solitude due to their large size. The southern area lacks screening and is, to a large extent, within view of nearby ranches.

C. **Primitive and Unconfined Recreation:** There are outstanding opportunities for various types of recreation, including day-hiking, backpacking, camping, hunting, horse-packing, rock climbing and nature study. These activities are concentrated in that portion recommended for wilderness. This area also offers diverse wildlife in the rugged scenic canyon. Game species include deer, antelope, cougar, chukar, sage grouse, quail and pheasant. Beaver are also present in the gorge. Recreation outside of the portion recommended for wilderness is fair, except for hunting (antelope) and nature study (wild horse viewing) which are considered excellent.

D. **Special Features:** The gorge of the North Fork of the Little Humboldt River is considered a significant special feature of geologic and ecologic significance. This 200 foot to over 700 foot deep gorge was cut during high runoff periods in the Pleistocene through a relatively featureless basalt and andesite plateau. This gorge harbors a great deal of wildlife and plants, including beaver, muskrat, mink and cougar and two species of rare plants. The plants are listed as sensitive on the Nevada Native Plant Society list. Artemisia packardiae no longer has any federal protection as it is more common than originally believed. The other, Hackelia ophiobia, is no longer considered to be under any threat. Its federal classification is category 3C which means it is no longer considered for listing as threatened and endangered.



▒ RECOMMENDED FOR WILDERNESS -

☐ RECOMMENDED FOR NONWILDERNESS·

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE

▥ SPLIT ESTATE -NONE

▤ STATE – NONE

▨ PRIVATE -

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N Fork of the Little Humboldt Proposal

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Diversity in the National Wilderness Preservation System

A. **Assessing the diversity of natural systems and features as represented by ecosystems**: Wilderness designation of this WSA would add 69,683 acres of the Sagebrush Steppe ecosystem in the Intermountain Sagebrush Province to the National Wilderness Preservation System (NWPS). Presently within the NWPS, only four wilderness areas contain this ecosystem. Since the Sagebrush Steppe ecosystem is represented to such a limited extent, adding more areas to the NWPS with this ecosystem is desirable. Table 2 summarizes the ecosystem information.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
	NEVADA			
Sagebrush Steppe	2	86,907	33	1,469,316

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers**: The WSA is within five hours driving of Reno, Nevada and Boise, Idaho. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Center	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
Idaho				
Boise	22	937,766	172	5,127,039

C. **Balancing the geographic distribution of wilderness areas**: The 1989 designation of Forest Service wilderness created a wide distribution of wilderness areas within the state, and the addition of the North Fork of the Little Humboldt River WSA would not significantly contribute to the geographic distribution of areas within the NWPS in Nevada. However, the wilderness values inherent in the WSA justify its addition to the NWPS.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character)

The entire WSA is manageable as wilderness. There would be no major conflicts with the exception of the 80 acres of private inholdings and the 498 acres of oil and gas leases.

There would be management problems, however, associated with that portion of the WSA recommended for nonwilderness. Most of that area is accessible to off-road vehicles. The presence of the private property around the south end would reduce solitude. The roads and ways in this portion would reduce naturalness as would the range improvements.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists, (6) past and present mining activities and (7) the USGS/BM Mineral Report.

As a result of the available information, the BLM reached the following conclusions: 9,000 acres of moderately favorable land for geothermal steam and 7,050 acres of moderately favorable land for nonmetallic minerals (zeolite).

Based on surrounding current and past metallic mineral exploration/development, short-term interest within the area recommended for uses other than wilderness is likely. This interest would result in zeolite exploration consisting of cross-country travel, drill pads, one mile of access road, dozer trenches and open cuts disturbing five acres along the southern edge of the WSA. Zeolite is a light weight absorbent material used commonly in kitty litter.

Geothermal exploration has subsided compared to the past, however, proposed developments are increasing in the surrounding areas. This interest would result in exploration consisting of cross-country travel, small drill sites and 1/2 mile of access road disturbing five acres along the southern edge of the WSA. The above information is located in the Wilderness Environmental Impact Statement for the Winnemucca District.

The USGS/BM mineral report, (Survey Bulletin 1732-A), states that mineral potential for portions of the recommended suitable portion of the WSA is low. The remainder of the recommended area has no mineral potential. It also determined that there is no potential for oil and gas and geothermal potential is unknown. There are presently no mining claims and 498 acres of oil and gas leases in the WSA.

In summary, quantities of various minerals are unknown but there is a moderate potential for occurrence for nonmetallic minerals and geothermal steam as identified in the Environmental Impact Statement.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness	No Wilderness
Impacts on Wilderness Values	Wilderness values would be preserved on 8,900 acres including a special feature - the Humboldt River Gorge. Naturalness would be impaired on approximately 5% or 3,010 acres due to ORV use and surface disturbance from energy and mineral activity. Solitude would be adversely impacted on about 170 acres (less than 1%) from ORV use and energy and mineral activity. Opportunities for primitive recreation would decrease due to increased ORV use and energy and mineral activity.	The values of naturalness, solitude and primitive recreation would be preserved throughout the WSA. The special feature of the Humboldt River Gorge would receive long-term protection.	None of the 69,683 acres would receive long-term protection. Humboldt River Gorge would not receive long-term protection. Naturalness would be impaired on about 4% or 3,015 acres as a result of ORV use and energy and mineral activity. Solitude would be adversely impacted on about 170 acres (less than 1%) from ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	No mineral resources have been identified nor is any exploration or development anticipated in the area recommended for wilderness. Projected zeolite exploration opportunities would be possible in the portion of the WSA not recommended for wilderness.	Projected zeolite exploration opportunities would be foregone.	Projected zeolite exploration opportunities would be possible.
Impacts on the Level of Exploration for Geothermal Resources	No energy resources have been identified nor is any exploration or development anticipated in the area recommended for wilderness. Projected geothermal exploration would be possible in the area not recommended for wilderness.	Geothermal exploration opportunities would be foregone.	Projected geothermal exploration opportunities would be possible.
Impacts on Motorized Recreational Vehicle Use	15 visitor hours of current ORV use and 30 hours of foreseeable future use would be displaced annually in the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 65 hours to 150 hours annually.	80 visitor hours of current ORV use and 180 hours of foreseeable future use would be displaced annually. This use would be easily absorbed on adjacent lands.	ORV use would grow from the current 80 visitor hours to 180 hours annually.

Local and Social Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 13 comments discussed characteristics of the area (e.g., intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: opportunities for solitude, naturalness and special features. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions and lack of outstanding opportunities for solitude.

Three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno On November 8, 1983) during the 90-day comment period for the Draft Wilderness Environmental Impact Statement. Of the five oral comments received, three people supported more wilderness than that of the preferred alternative and two people supported the preferred alternative. Of the 78 people who submitted written comments, 65 of them supported more wilderness than that listed in the draft EIS and thirteen of them supported the draft EIS. The comments remarked on the spectacular scenery of the canyon, the trees in the canyon and the raptors and other wildlife in the area.

No comments about wilderness were received from Humboldt County agencies or officials. However, the county's land use plan addresses wilderness designation specifically under Goal 5: "To prevent commonly used areas of Humboldt County from being erroneously designated as 'wilderness or roadless areas'. In addition, Goal 6 states: "To maintain the existing roads and access necessary to the continued economic well being of Humboldt County including the agriculture, livestock, mining and tourist industries as well as to maintain the quality of life in Humboldt County by ensuring access to recreational lands of all kinds including fishing, wildlife, rock-hounding, sightseeing, off road vehicle use, horseback and backpacking use and general enjoyment of the {sic] Nevada's traditional wide open spaces."

Because the terms "commonly used area" and "erroneously designated as wilderness" are not defined, it is difficult to determine whether wilderness designation is consistent or inconsistent with Goal 5. Wilderness designation could be both consistent and inconsistent with Goal 6 since wilderness designation would ensure public access for most recreational activities mentioned but close areas to off-road use.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "Your preferred alternative recommends wilderness designation for the river gorge itself and a limited area above the canyon walls. The scenic values of the river gorge are very high, and resource conflicts are very low. We concur that the preferred alternative is reasonable." This letter was in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Air Force supports wilderness designation provided no restrictions were placed on military flights. It said it will work with the BLM if military flights create problems in some areas.

No comments were received on the final EIS.

AUGUSTA MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA - 89,372 acres

The Augusta Mountain WSA (NV-030-108) is located in three Nevada counties: southeast Pershing, northeast Churchill and western Lander. The WSA is approximately 60 miles southeast of Winnemucca, Nevada and a 5-hour drive from Reno, Nevada. The WSA includes 89,372 acres of public lands and no private or state inholdings (Table 1).

The study area is bordered on the south by the Hole in the Wall Road, on the southeast by the Hyder Hot Spring Road leading to the Lower Home Station Ranch Road. The boundary proceeds north along this road to the road heading south from Section 19, when it heads south until it meets the Hot Springs Road, at which time it returns to the northeast to the Home Station Ranch Road, after jockeying around the ranch. The boundary then proceeds to the northeast until it reaches the road heading due east to Favret Canyon. The boundary proceeds east for one and a quarter miles, until it reaches the Favret Canyon Road at which time it heads northwest down the Favret Canyon Road until it rejoins the Home Station Ranch Road at which time it continues north. In Section 24, the boundary follows the road heading southeast, continuing on in the same direction up the canyon after the road ends to the first broad bench. The boundary follows the high point of the bench to the north until it meets the road in Section 20, following it down to the Home Station Ranch Road again. The boundary continues north, jockeying around the private property of the upper Home Station Ranch until it reaches the Home Station Gap Road. The boundary heads southeast along this road until it reaches the Cain Spring Road, at which time it heads toward Cain Spring, to the south. At Cain Spring, the Road continues south to the McCoy Mine Road, where it meets the Hole in the Wall Road at the southeast corner.

At its maximum dimensions, the Augusta Mountain WSA ranges from 17 miles in a north-south direction to 13 miles in an east-west direction. The altitude ranges from 3,400 feet to 8,400 feet.

The WSA straddles a north-south ridge of the Augusta Mountain Range. The study area can be divided into three sections: northern, central and southern. The northern portion is a landscape of silicic ashflow tuff canyons and drainages. Isolated patches of pinyon-juniper are scattered through the area. The central section encompasses Cain Mountain, a limestone peak which is the highest point of the WSA. The mountain drains in all directions via rugged, deep drainages--Favret Canyon being the largest. The canyons have fossils and are blocked by intermittent waterfalls, with dense pinyon-juniper stands in the upper reaches.

The southern portion of the WSA is 6 to 7 miles long and 13 miles wide. It is uniformly hilly with shallow southwest draining washes and gullies and gently sloping foothills vegetated with low sagebrush and rabbitbrush. There are approximately 1,000 acres of pinyon-juniper woodland covering slopes above 6,600 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Final Winnemucca District Wilderness Recommendations Environmental Impact Statement released in September, 1987. There were three alternatives analyzed in the EIS: an all wilderness alternative, a partial wilderness alternative where 12,800 acres would be designated as wilderness and 76,572 acres would be released for uses other than wilderness, and a no wilderness alternative, which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness
89,372 acres recommended for nonwilderness

The recommendation for this WSA is to release all 89,372 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change for the natural environment over the long-term. Although the recommendation is not the all wilderness alternative, the recommendation would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

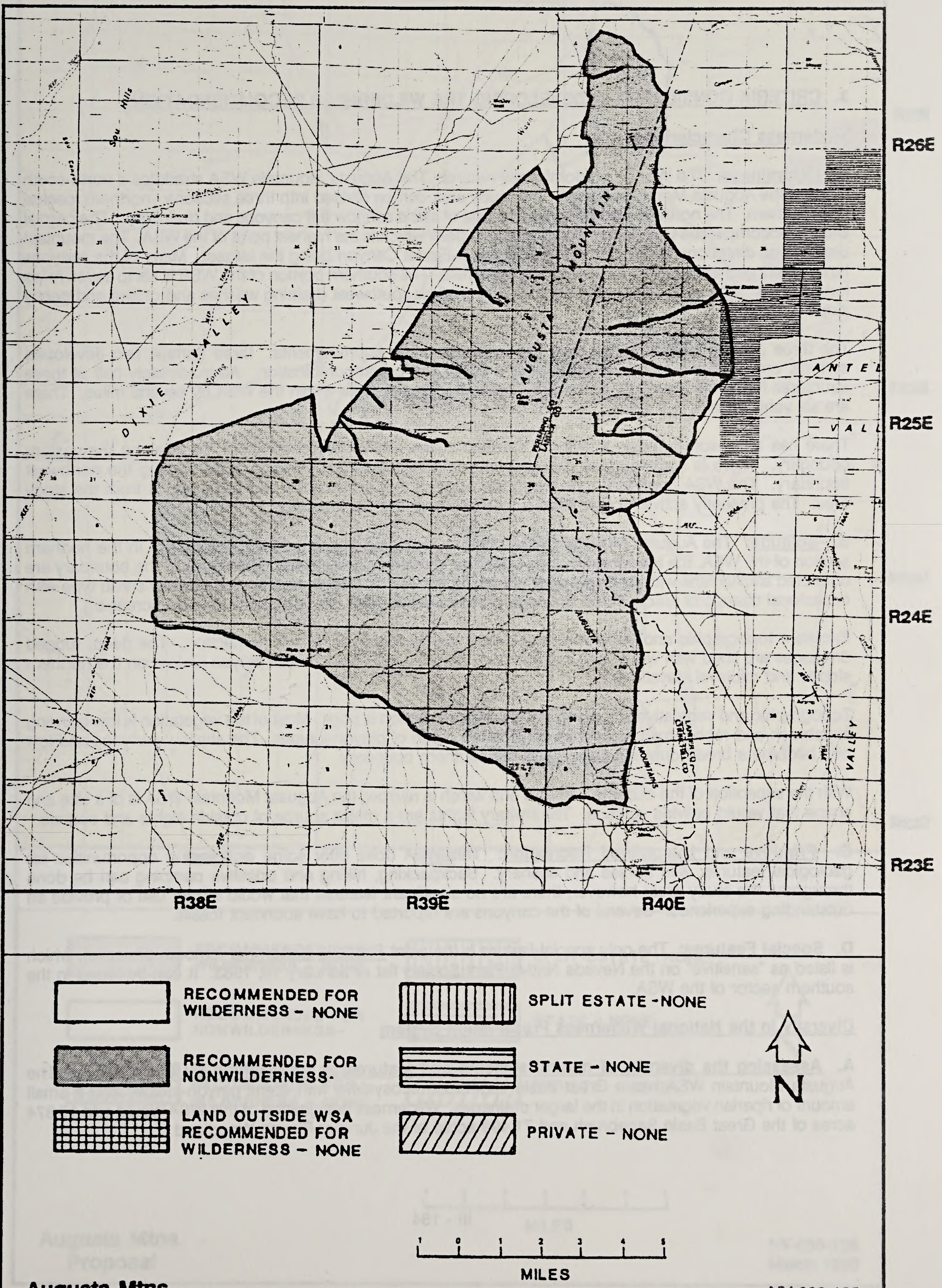
The recommendation for the Augusta Mountains WSA emphasizes maintaining access to the entire WSA for mineral exploration and extraction. Large portions of the WSA have potential for the occurrence of a diverse group of mineral resources including geothermal, oil and gas, hardrock locatable minerals and saleable minerals. There is a high potential for geothermal resources. In addition, there is moderate potential for occurrence of cobalt, uranium, mercury, tungsten, nickel and zinc, all of which are listed as Strategic and Critical Materials. The recommendation would also make available potentially economic deposits of limestone, dolomite and zeolite which have moderate potential for occurrence in the WSA. Oil and gas resources have moderate potential for occurrence on parts of the WSA. The recommendation encourages exploration and development of these energy resources.

The high and moderate potential for occurrence of a diversity of mineral resources in the different parts of the WSA combined with the current interest in the area (2,000 acres of mining claims, 40,000 acres of oil and gas leases and 20,000 acres under lease for geothermal development) is sufficient evidence to conclude that in the future this area could produce significant quantities of important mineral resources.

The development and extraction of mineral resources in this WSA will cause the loss of wilderness values. Development of some or all of the 2,000 acres of mineral claims would occur with or without wilderness designation since these are all pre-FLPMA claims. Other mineral exploration and development would probably affect 2,000 acres of the WSA. Because the areas with mineral resource potential are so widely dispersed there was no reasonable alternative that would allow for wilderness designation, but it is projected that even after mineral exploration much of the area will retain wilderness characteristics.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	89,372
Split Estate (BLM surface only)	0
Inholdings (State, Private)	0
Total	89,372
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Recommended for Wilderness	0
Inholdings	0
Within the Area Not Recommended For Wilderness	
BLM	89,372
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	89,372
Inholdings (State, Private)	0



Augusta Mtns.
Proposal

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. **Naturalness:** The WSA is predominantly natural. The Augusta Mountain WSA straddles a north-south ridge of the Augusta Mountain Range. The study area can be divided into three sections: northern, central and southern. The northern portion is a landscape of silicic ashflow tuff canyons and drainages. The central section encompasses Cain Mountain, a limestone peak which is the highest point of the WSA. The mountain drains in all directions via rugged, deep drainages--Favret Canyon being the largest. Many of the canyons have fossils and are blocked by intermittent waterfalls. The southern portion of the WSA is six to seven miles long and 13 miles wide. It is uniformly hilly with shallow southwest draining washes and gullies and gently sloping foothills.

The three grazing allotments do have the following range improvements: three corrals, two developed springs, one well, two fences (5 miles) and a cabin and corral combination. Approximately half of these structures lie on the boundary of the WSA while the remainder lie within the WSA by several miles. There are six vehicle ways (4.4 miles).

There has been some mining activity in the past at the end of two cherrystem roads along the eastern boundary. There is some surface disturbance from past exploratory mining activity along the northwest boundary. The WSA boundary runs along the edge of this disturbance and eliminates it from the study area. The presently active McCoy Mine is 1/2-mile from the southern tip.

B. **Solitude:** The Augusta Mountain WSA offers outstanding opportunities for solitude. In the northern section of the WSA, the topographic and vegetative screening is excellent. The edges of the boundary are dissected alluvial fans with relatively poor screening for visitors. Vegetation is mainly a low shrub type with occasional clumps of willow in the drainage bottoms which offer fair to good vegetative screening.

Excellent topographic and vegetative screening may be found in the middle section. The deep, rugged drainages are lined with willow and cottonwood, with dense populations of pinyon-juniper on the northern slopes and midlevel elevations.

Topographic and vegetative screening in the southern section is poor. Most of the vegetation is low growing sagebrush and rabbitbrush, except for an isolated patch of pinyon-juniper. The shallow canyons and low hills become a broad outwash plain along the southern boundary.

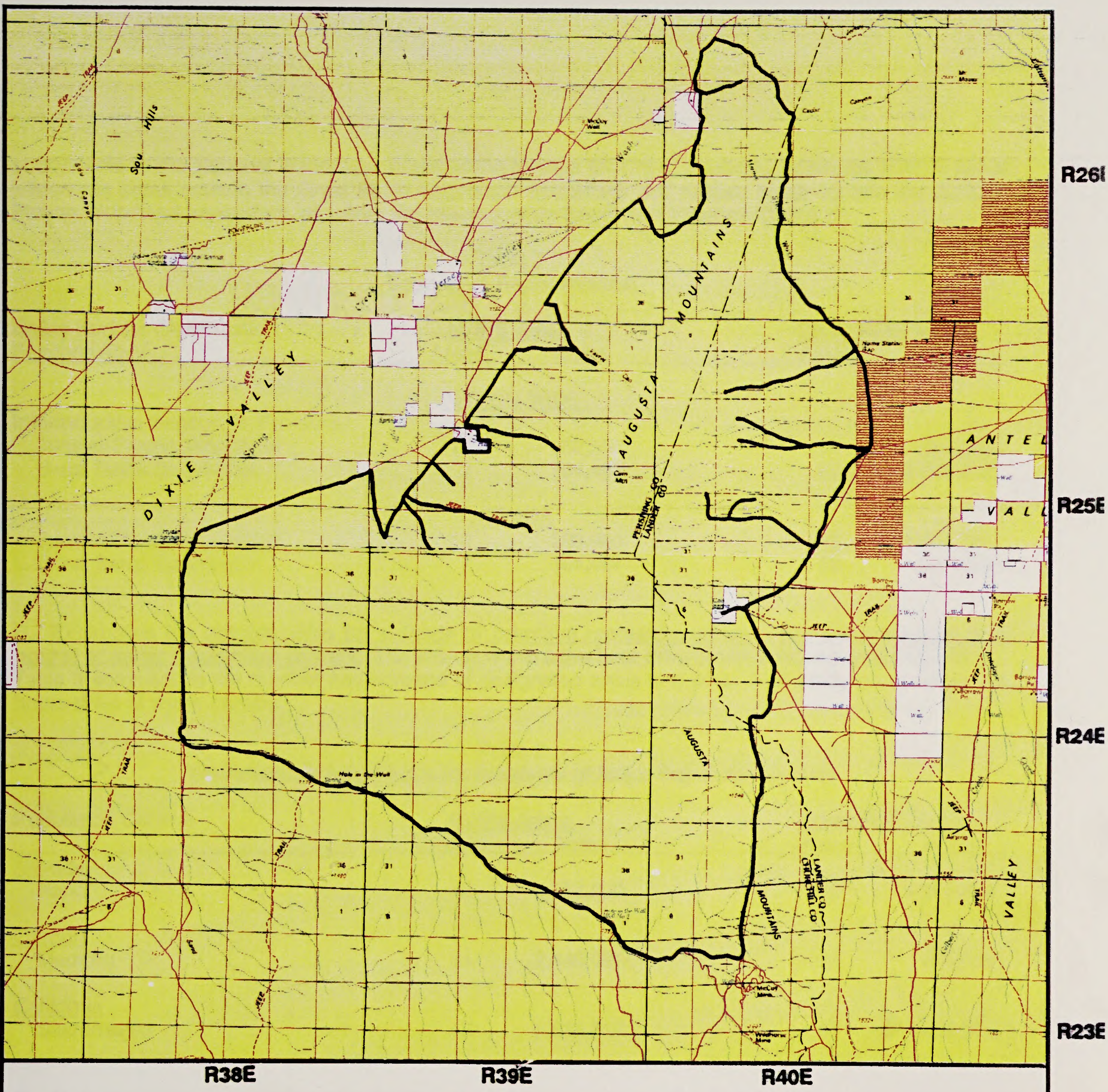
With the exception of the extreme northern end which is narrow, the Augusta Mountain WSA is of a size and shape that would provide solitude. The military flights are a major source of outside sights and sounds.

C. **Primitive and Unconfined Recreation:** This WSA does offer some sightseeing opportunities for geological features, wild horses and scenery. Backpacking, hiking and primitive camping can be done throughout the study area; however, there are no significant features that would attract use or provide an outstanding experience. Several of the canyons are reported to have abundant fossils.

D. **Special Features:** The only special feature is the plant Phacelia glaberrima (smooth phacelia), which is listed as "sensitive" on the Nevada Native Plant Society list of January 19, 1983. It can be found in the southern sector of the WSA.

Diversity in the National Wilderness Preservation System

A. **Assessing the diversity of natural systems and features as represented by ecosystems:** The Augusta Mountain WSA has a Great Basin sagebrush ecosystem with some pinyon-juniper and a small amount of riparian vegetation in the larger drainages. Wilderness designation of this WSA would add 17,874 acres of the Great Basin Sagebrush and 71,498 acres of the Juniper-Pinyon Woodland



▨ RECOMMENDED FOR WILDERNESS – NONE

☐ RECOMMENDED FOR NONWILDERNESS-

▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS – NONE

▥ SPLIT ESTATE -NONE

▤ STATE – NONE

▨ PRIVATE – NONE

N

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Proposal

NV-030-108
March 1990

ecosystems to the National Wilderness Preservation System (NWPS). Presently, within the NWPS, seven wilderness areas contain the Great Basin Sagebrush ecosystem and sixteen areas contain the Juniper-Pinyon Woodland ecosystem, all within the Intermountain Sagebrush Province (Table 2).

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
NATION WIDE				
Intermountain Sagebrush Province/				
Juniper-Pinyon Woodland	16	362,556	77	2,250,026
Great Basin Sagebrush	7	104,407	60	1,088,540
NEVADA				
Juniper-Pinyon Woodland	10	268,900	45	1,645,628
Great Basin Sagebrush	7	104,407	38	847,326

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of three major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these centers.

Table 3
Wilderness Characteristics for Residents of Major Population Centers

Population Centers	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
Oregon				
Medford	31	2,440,081	21	730,038
California				
Sacramento	48	5,039,817	87	2,479,541

C. Balancing the geographic distribution of wilderness areas: The Augusta Mountains WSA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of this WSA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The WSA is considered to be manageable but there will be major problems due to the following: 2,000 acres of valid, preFLPMA mining claims, 18,101 acres of land under geothermal leases and 44,266 acres under oil and gas leases. If any of these parcels of land are developed, as the possessors would have the legal right to do, intrusions created by mining, drilling or many other operations would seriously impact the wilderness values present. Noise, dust and visual Intrusions are a few of the impacts. Reasonable access to allow the possessors of these claims and leases to reach the parcels would also have to be granted. This would involve new roads scarring up the countryside and the additional noise and dust created by vehicles working in the area. Other management concerns include 4.4 miles of ways, and regular military flights over the study area.

Energy and Mineral Resource Values

The energy and mineral potential of the WSA has been rated by using the following pieces of information: (1) a literature search, (2) the 1982 Barringer Report (a federally contracted mineral survey of the WSAs to identify mineral resources and incorporating extensive sampling), (3) evaluation of the geologic setting, (4) consultation with energy and mining companies as well as local prospectors, (5) minor field verification by BLM geologists and (6) past and present mining activities.

As a result of this information, the following conclusions were reached (Asterisks denote materials listed in the Strategic and Critical Materials Stockpiling Act of 1946, with changes in subsequent Acts): 37,400 acres rated moderate for metallic mineral potential (tungsten*, zinc*, nickel*, mercury*, cobalt* and uranium), 89,372 acres rated as moderate for nonmetallic mineral potential (limestone, dolomite and zeolite), 31,000 acres with moderate potential for oil and gas, 31,000 acres with high potential for geothermal and 21,300 acres with moderate potential for geothermal resources. Mercury*, silver, antimony*, lead*, zinc*, copper*, gold, manganese*, fluorospar* and zeolites have been produced from the Wild Horse, Bernice, Mount Tobin and Jersey Valley Districts. The Dixie Valley Known Geothermal Resource Area (KGRA) includes five sections within the WSA. Documented oil showings occur in chambers of ammonite fossils found in Triassic shales in the Augusta Mountain WSA.

There are 2,000 acres of valid, preFLPMA mining claims present, as well as 18,101 acres of geothermal leases and 44,266 acres of oil and gas leases. There is no present production of any mineral, geothermal or oil and gas resources in the study area.

It is projected that precious metal exploration, consisting of cross-country travel, 2 1/2 miles of drill roads, drill pads, and dozer trenches disturbing 30 acres would be established. Developing geothermal interest could result in the establishment of two 10 to 20 megawatt powerplants with associated well pads, eight miles of access roads, powerlines, pipelines and powerplant structures disturbing 80 acres. Oil and gas geophysical exploration activities are expected to continue at the current rate. This interest would result in further exploration consisting of cross country travel, disturbing 15 acres along the west, south and southeast sides of the WSA. Two oil and gas well pads and 4 miles of access roads disturbing 20 acres would occur in the southwest and southeast portions of the WSA. The creation of access roads, the development of a mine, oil and gas or geothermal operation and the extraction of an ore body or energy resources would reduce the wilderness values of the area.

In summary, quantities of various mineral and energy resources are unknown, but there is a moderate potential for mineral occurrence throughout the WSA. There is also high potential for geothermal resources in one third of the study area and a moderate potential in part of the remainder. The total acres of projected disturbance from energy/mineral activity would be approximately 195 acres.

Impacts on Resources

The comparative impact table (Table 4) on the following pages summarizes the effects on pertinent resources for all alternatives considered, including designation or nondesignation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic considerations were not deemed to be significant issues for analysis.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Partial Wilderness Alternative
Impacts on Wilderness Values	None of the 89,372 acres would receive long term protection. Naturalness would be impaired on 13% or 11,195 acres due to increased ORV use and energy and mineral activity. Solitude would be adversely impacted on approximately 3% or 3,060 acres due to increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. There are no unique special features, but the WSA does contain scenic Favret Canyon and Cain Mountain which would not receive long-term protection.	The values of naturalness, solitude, and primitive recreation would be preserved throughout the WSA. Cain Mountain and Favret Canyon would receive long-term protection.	Area Recommended For Wilderness: Wilderness values would be preserved on 12,800 acres. Cain Mountain would receive long-term protection. Area Not Recommended For Wilderness: Naturalness would be impaired on approximately 15% or 11,180 acres due to increased ORV use and energy and mineral activity. Solitude would be adversely impacted on approximately 4% or 2,975 acres due to increased ORV use and energy and mineral activity. Opportunities for primitive recreation would be decreased due to increased ORV use and energy and mineral activity. There are no unique special features but Cain Mountain would receive long-term protection.
Impacts on Exploration for and Development of Non-Energy Mineral Resources	Projected base-precious metal and zeolite exploration and develop-ment would be possible.	Base-precious metal and zeolite exploration and development would be foregone.	Base-precious metal and zeolite exploration and development would be foregone in the area recommended for wilderness. Projected base-precious metal and zeolite exploration would be possible in the area not recommended for wilderness.
Impacts on the Level of Exploration for and Development of Oil and Gas and Geothermal Resources	Projected geothermal and oil and gas exploration and development of 2 small geothermal power plants would be possible.	Geothermal and oil and gas exploration and development of 2 small geothermal power plants would be foregone.	Potential geothermal and oil and gas opportunities would be foregone in the area recommended for wilderness. Projected geothermal and oil and gas exploration and development of 2 small geothermal power plants would be possible in the area not recommended for wilderness.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness	Partial Wilderness Alternative
Impacts on Motorized Recreational Vehicle Use	ORV use would grow from the current 200 visitor hours to 450 hours annually.	200 visitor hours of current ORV use and 450 hours of foreseeable use would be displaced annually. This use would be easily absorbed on adjacent lands.	10 visitor hours of current ORV use and 20 hours of foreseeable future use would be displaced annually in the area recommended for wilderness. This use would be easily absorbed on adjacent lands. In the area not recommended for wilderness, ORV use would grow from the current 190 visitor hours to 430 hours annually.

Summary of WSA-Specific Comments

During the initial and intensive inventory stages (1978-1980), many of the 12 comments discussed characteristics of the area (intrusions, resources, wilderness qualities) or suggested boundary changes. Reasons given for supporting wilderness study area status were the following: special features and the area met wilderness specifications. Reasons given for opposing wilderness study area status were these: other resource values, roads, intrusions, lack of outstanding opportunities for solitude and that it was in a military operating area. These comments addressed the entire 96,000 acres of the original study area. About 7,000 acres have since been released from wilderness consideration.

Three formal public meetings were held in Nevada (Gerlach on November 1, Winnemucca on November 3 and Reno on November 8, 1983) during the 90-day comment period for the Draft Wilderness Environmental Impact Statement. The one oral comment that was received supported the Proposed Action (No wilderness). Of the 68 written comments received, 58 of them supported more wilderness and 10 of them agreed with the Proposed Action.

Comments addressed the need to preserve the land in its natural state for future generations, characteristics of the WSA (prehistoric fossils, scenery, wildlife, wild and natural aspects, examples of vulcanism, opportunity for solitude experiences) as well as roads and other intrusions, military flights and the potential mineral resources.

Pershing County (with about 35 percent of the WSA) wants to preserve all public lands within the county's boundaries as multiple-use areas (multiple use is not defined). No comments about wilderness were received from county agencies or officials of Lander or Churchill Counties.

In a letter to the Winnemucca District, dated December 30, 1983, the Governor of the State of Nevada said, "We concur that this area should not be further considered for wilderness status. It has substantial sections with high geothermal and moderate mineral potential and is affected by military overflights. The wilderness quality is not high." The letter was written in response to the Draft Wilderness Environmental Impact Statement.

The U.S. Navy supports wilderness designation provided no restrictions are placed on military flights.

No comments were received on the Final Environmental Impact Statement.

LAHONTAN CUTTHROAT TROUT NATURAL AREA INSTANT STUDY AREA

1. THE STUDY AREA - 12,316 acres

The Lahontan Cutthroat Trout Natural Area ISA is located in western Humboldt County, approximately 78 miles northwest of Winnemucca. The ISA is comprised of 12,316 acres of public lands with 1,256 acres of private inholdings (Table 1).

The entire ISA boundary is based on legal descriptions with the Summit Lake Indian Reservation forming a portion of the western perimeter. Refer to Maps 1 & 2.

The ISA straddles the north end of the Black Rock Range, a typical mountain range of the Basin and Range Geomorphic Province. It is an outstandingly beautiful area with its running water, large stands of quaking aspen, willow and mahogany trees, lush meadows, colorful rock formations and good populations of wildlife. The northern extremities of the Black Rock Desert lie to the east and west. Elevations range from 6,120 feet to 8,799 feet.

The Natural Area was established in 1973 to ensure the preservation of the Lahontan Cutthroat Trout, a threatened species of fish, in its natural habitat and to maximize available spawning areas. Natural features of the area consists of scattered stands of aspen and mountain mahogany, mountains and creeks.

The ISA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Nevada Contiguous Lands Final Wilderness Environmental Impact Statement released in January, 1990. There were two alternatives analyzed in the EIS: an all wilderness alternative and a no wilderness alternative which is the recommendation in this report.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness
12,316 acres recommended for nonwilderness

The recommendation for this ISA is to not designate it as wilderness but to release it for uses other than wilderness. All wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term.

The Lahontan Cutthroat Trout Natural Area ISA is recommended for nonwilderness because of the lack of any units equal to or greater than 5000 acres in size, excessive intrusions and private property and an extensive road system. Because of the small size of all the units within the area, wilderness values could not be preserved on any portion of this ISA.

Table 1

Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area	
BLM (surface and subsurface)	12,316
Split Estate (BLM surface only)	0
Inholdings (State, Private)	1,256
Total	14,572
Within the Recommended Wilderness Boundary	
BLM (Within WSA)	0
BLM (Outside WSA)	0
Split Estate (Within WSA)	0
Split Estate (Outside WSA)	0
Total BLM Land Recommended for Wilderness	0
Inholdings (State, Private)	0
Within the Area Not Recommended For Wilderness	
BLM	12,316
Split Estate	0
Total BLM Lands Not Recommended For Wilderness	12,316
Inholdings (State, Private)	1,256

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

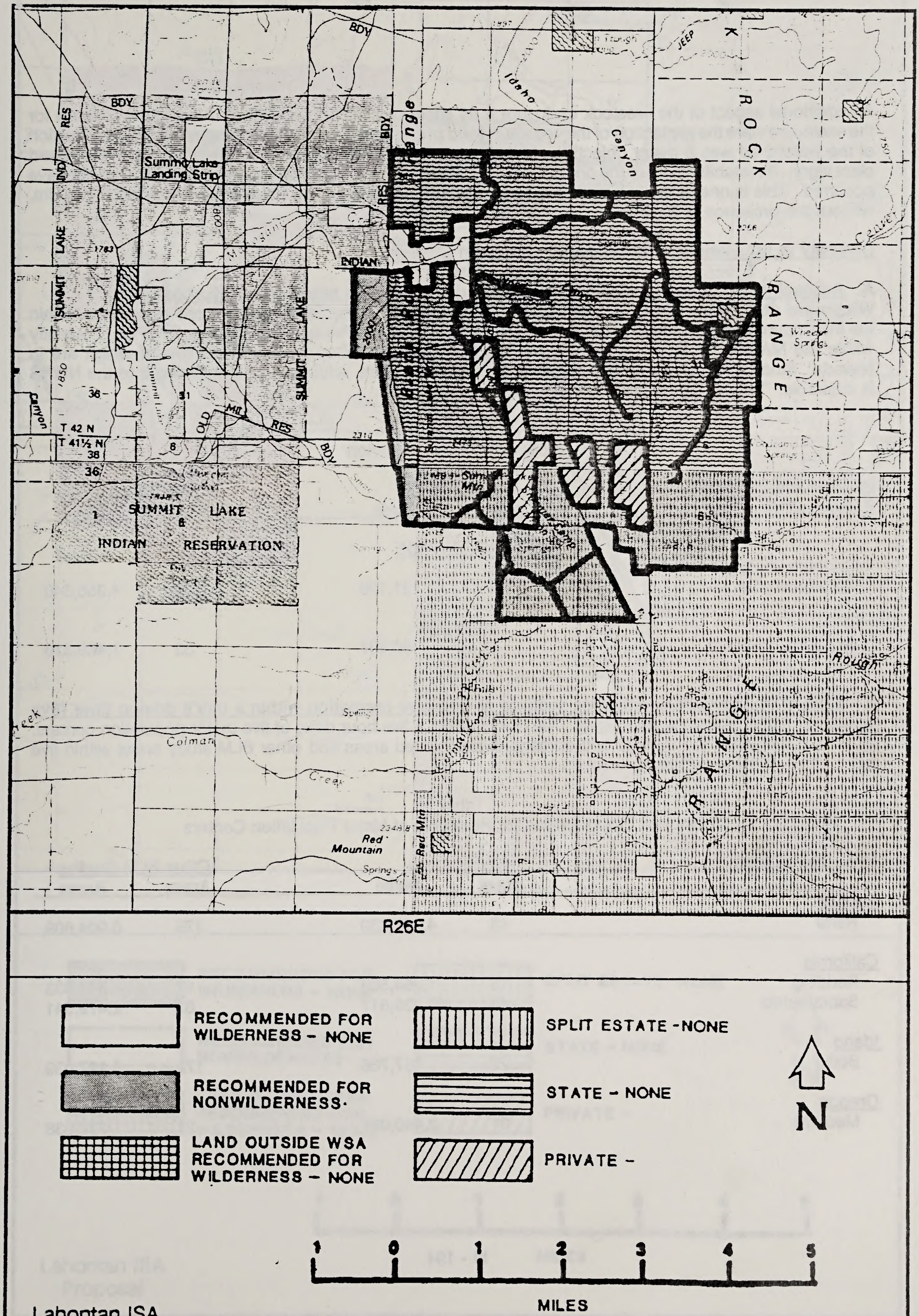
Wilderness Characteristics

A. **Naturalness:** The ISA is not primarily natural. It is an outstandingly beautiful area with its running water, large stands if quaking aspen, willow and mahogany trees, lush meadows, colorful rock formations and good populations of wildlife. While some portions of the study area are in a natural condition, there are numerous intrusions, including 22 miles of roads, fences, corrals and several cabins which would be impossible to rehabilitate without altering the objectives of the natural area and obtaining the private parcels of land located within the ISA. The study area is divided into 12 individual units by the roads which run through the area. Each of these subunits contains less than 5,000 acres.

B. **Solitude:** Because of the limited size, easy access from three directions, the extensive road system throughout the area and the private inholdings, the solitude of the area has been classified as marginal. Although there are many areas where the visitor experiences solitude because of the topography and vegetation, the numerous examples of man's presence in the area severely detracts from the experience.

C. **Primitive and Unconfined Recreation:** There are good recreation opportunities within the ISA. Activities such as backpacking, hunting, nature study, horseback riding, photography, cross country skiing and winter camping are all feasible. Although the creeks contain Lahontan Cutthroat Trout, it is not legal to fish for them. Due to the small sizes of the creeks, however, the fish are usually quite viewable. The presence of cool flowing water appeals to a number of people who desire a change from the lower hot, arid desert.

D. **Special Features:** The outstanding special feature of the ISA is the presence of the Lahontan Cutthroat Trout. The fact that these fish use a major stream (Mahogany Creek) as a principal spawning area was the reason for the creation of the Natural Area. To protect the quality of the water in the streams, 2,410 acres or 20 percent of the study area were fenced to exclude livestock from their headwaters. The trout is listed as "threatened" on the "Federal Register of Threatened and Endangered Species".



Lahontan ISA Proposal

An additional aspect of the livestock exclosure is its effect on riparian vegetation. Among the reasons for the exclosure were the protection of the vegetation and prevention of trampling of streambanks. Stabilization of the watershed was a major objective. Since the exclosure was established, there has been increased plant vigor. Reestablishment of the original, native plant community and improvement of wildlife habitat have occurred. This is one of the few places in Nevada where people can see what the environment looks like, without the presence of livestock.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of this WSA would add 12,316 acres of the Sagebrush Steppe ecosystem within the Intermountain Sagebrush Province to the National Wilderness Preservation System (NWPS). Presently within the NWPS four wilderness areas contain the Sagebrush Steppe ecosystem two of which are in Nevada. Since this ecosystem is represented to a limited extent, adding areas containing it to the NWPS is desirable. Table 2 summarizes the ecosystem information.

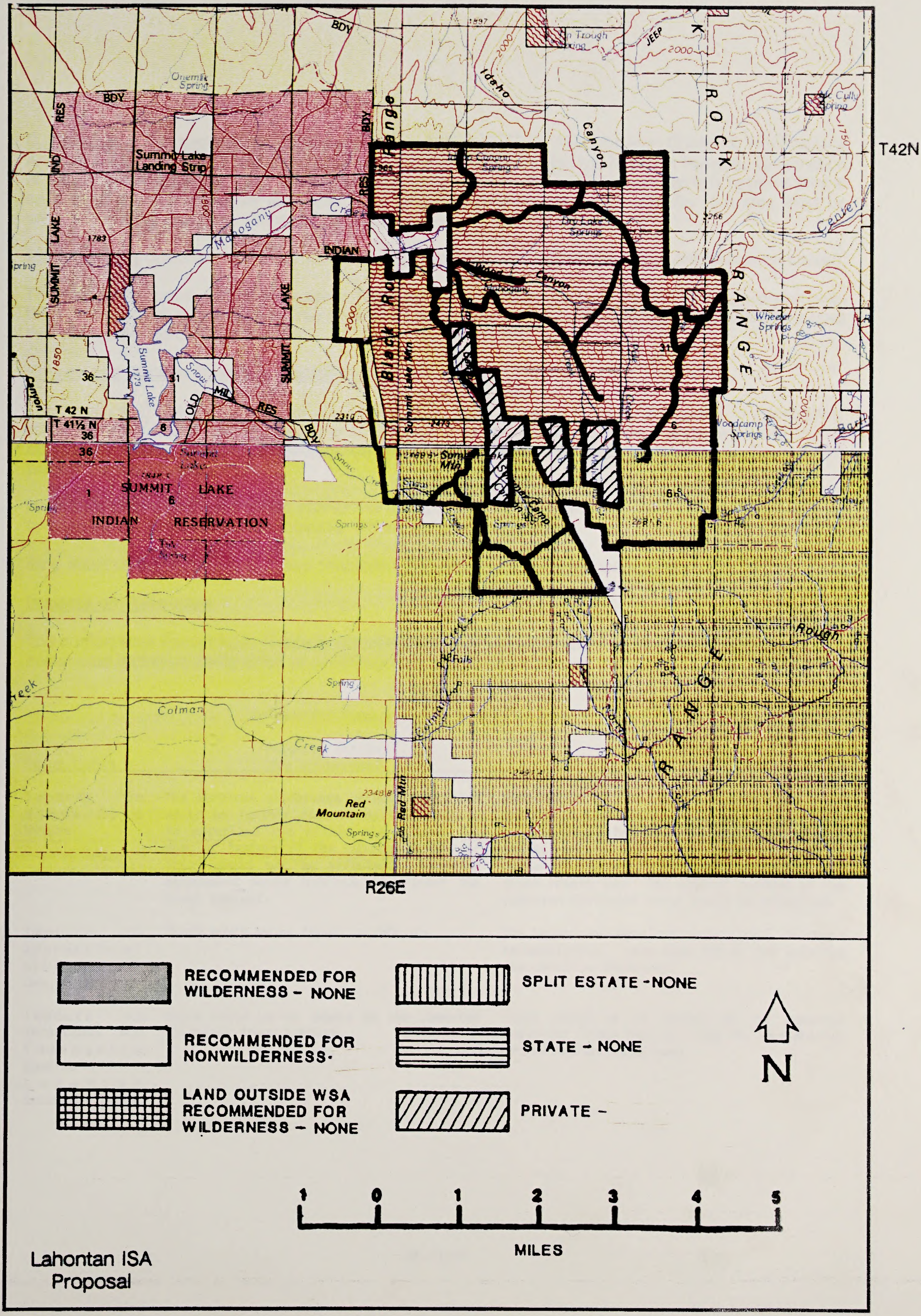
Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
NATION WIDE				
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	136	4,356,340
NEVADA				
Sagebrush Steppe	2	86,907	33	1,469,316

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The ISA is within a five hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within five hours drive of these population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Center	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Nevada				
Reno	45	4,967,230	175	6,904,809
California				
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Idaho				
Boise	22	937,766	172	5,127,039
Oregon				
Medford	31	2,440,081	21	730,038



Lahontan ISA Proposal

C. Balancing the geographic distribution of wilderness areas: The Lahontan Cutthroat Trout Natural Area ISA would contribute to the geographic distribution of areas within the NWPS in Nevada. Designation of the Lahontan Cutthroat Trout Natural Area ISA would provide the public with wilderness opportunities in an area of the state presently limited in its offering of wilderness areas.Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The area is not managable as wilderness. There would be extreme management problems connected with the 14 roads which divide the area into 12 different sections and parcels of private lands (10% of study area) that are located throughout the ISA.

Energy and Mineral Resource Values

The energy and mineral potential of the ISA has been rated by using the following pieces of information: (1) a literature search, (2) evaluation of the geologic setting, (3) consultation with energy and mining companies as well as local prospectors, (4) minor field verification by BLM geologists and (5) past and present mining activities.

No known oil and gas, geothermal, uranium or thorium deposits occur within the ISA. There are no existing or pending oil, gas or geothermal leases. There are no mining claims.

As a result of this information, it was concluded that energy and mineral potential in the ISA is low.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects of pertinent resources for both alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (No Wilderness)	All Wilderness
Impacts on Wilderness Values	The marginal wilderness values of the ISA would be further reduced by the increase in motorized use within the area. The special feature of the Lahontan Cutthroat Trout would not be affected. Existing management would continue to protect the trout habitat.	Designation of the ISA as wilderness would benefit the values or naturalness and solitude by the preclusion of off-road, cross country travel within the ISA. However, overall wilderness values in this largely roaded area would remain low. The special feature of the Lahontan Cutthroat Trout would be preserved.
Impacts on Recreational Off-Road Vehicle Use	There would be no impact on ORV use.	The impacts to motorized recreational use would be negligible. Less than 10% of the existing use would be displaced.
Impacts on Threatened and Endangered Species - Lahontan Cutthroat Trout	There would be no impact on the Lahontan Cutthroat Trout habitat.	There would be no impact to the Lahontan Cutthroat Trout habitat from the designation of the ISA as wilderness.

Local Social and Economic Considerations

Social and economic considerations were not considered to be significant issues for analysis.

Summary of WSA-Specific Comments

Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. The ISA was not discussed.

Of the 36 written comments, one supported the all wilderness recommendation and three supported no wilderness. Comments were made on the large amount of private land, access to the Lahontan Cutthroat Trout fishery, elimination of line camps and the cost of policing the area.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

Humboldt County agreed with the proposed action (no wilderness).

PUEBLO MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 72,690 acres

The Pueblo Mountains WSA OR-2-81/NV-020-642 is located 96 miles south of Burns and 5 miles south of Fields, Oregon. The WSA is an irregularly shaped area containing 72,690 acres of public land, including 600 acres in Nevada. This total includes 3,380 acres of split-estate lands in Oregon (Table 1). As shown on Maps 1 and 2, almost all of the area is within Harney County, although a small portion crosses the state line into Humboldt County, Nevada. The entire study area lies to the west of the main north-south county road which runs between Fields and Denio, Nevada. The nearest major highway is Nevada State Highway 140, 4 miles to the south of the WSA.

The Pueblo Mountains WSA has been modified to include seven parcels of land, totaling 3,380 acres, acquired in an exchange with the State of Oregon following completion of the wilderness inventory. The State has retained the subsurface mineral estate, resulting in 3,380 acres of split-estate (federally managed surface, state subsurface or mineral rights) land within the WSA. The total acreage of the WSA is now 72,690 acres.

At the extremes, the area is 15 miles long and 11 miles wide. The boundary is formed by a combination of private land, BLM dirt roads, a paved county road (east side only), and legal subdivisions. Legal subdivisions form the boundary where portions of the inventory unit were excluded from further wilderness review because they lacked wilderness characteristics.

In addition, 12 low standard dead-end dirt roads (totaling 17 miles) enter the study area from various points around the perimeter and also form part of the boundary. One of the roads ends at a 320-acre parcel of private property, making the parcel a part of the boundary even though it is surrounded by the wilderness study area.

The most prominent physical feature of the study area is the Pueblo Mountains ridgeline which runs north and south along the entire length of the western half of the WSA. This is a tilted fault block mountain range, the eastern side of which has been uplifted along a north-south trending fault. Averaging 7,300 feet in elevation along the crest, the eastern face of this ridge is steep, rugged and rocky while much of the western slope is like a table top tilted to the west at nearly a 45-degree angle.

Less than 3 miles east of the western ridge lies a shorter (9-mile-long) north-south ridgeline. Along this ridgeline is Pueblo Mountain. At 8,634 feet, it is the second highest peak in southeastern Oregon and the highest point in the study area. Two major drainages originating in the central portion of the study area, Willow Creek and Cottonwood Creek skirt this ridgeline to the north while both Arizona Creek and Van Horn Creek cut through the ridge within rugged canyons. Denio Creek also cuts through the ridge; a portion of this drainage is outside the study area to the south. Although steep, the eastern slope of this ridgeline is much less rugged and rocky than the ridge to the west. The eastern slope gives way to foothills and lowlands along the eastern boundary as it merges with the Pueblo Valley.

It is along the eastern boundary that the study area reaches its lowest elevation (at several points) of just under 4,200 feet. A series of high valleys, basins and meadows lie between the two ridges.

The WSA was studied under Sections 603 and 202 of the Federal Land Policy and Management Act (FLPMA), and was included in the Final Oregon Wilderness Environmental Impact Statement (EIS) published in December 1989. There were five alternatives analyzed in the EIS:

All wilderness (72,690 acres of public land, including 600 acres in Nevada).

No Wilderness

A partial wilderness alternative that would designate 68,610 acres of public land, including 600 acres in Nevada and adding 5,280 acres of public land outside of the WSA boundary. Assuming acquisition of 3,910 acres of private land and the mineral estate of 3,875 acres of split-estate, 77,800 acres would be recommended for wilderness.[2] Four thousand eighty acres would be released for uses other than wilderness.

A partial alternative that would designate 41,315 acres of public land, including 600 acres in Nevada and release 31,375 acres for uses other than wilderness. Assuming acquisition of 1930 acres of private lands and the mineral estate of 2,440 acres of split-estate, 43,245 acres would be recommended for wilderness.

A partial alternative, which is the recommendation of this report, that would designate 26,150 acres of public land, including 600 acres in Nevada and release 46,540 acres of uses other than wilderness.[3] There are no private lands within the recommended area but an attempt would be made to acquire the mineral estate of 1,740 acres of split estate.

2. RECOMMENDATION AND RATIONALE - 26,150 acres recommended for wilderness 46,540 acres recommended for nonwilderness[4]

The recommendation for this WSA is to designate 26,150 acres as wilderness and release 46,654 acres for uses other than wilderness (Maps 1 & 2). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. The partial wilderness alternative, the recommendation of this report, would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The area recommended for wilderness is basically the core of the study area. It contains the highest quality wilderness values and special features within a unit capable of being managed to preserve these qualities. It is natural in appearance and has outstanding opportunities for solitude due to its enclosure by rugged ridgelines with steep escarpments and the deeply incised drainages frequently vegetated with quaking aspen, cottonwood, Mormon tea and other screening brush species. It can support a variety of high quality primitive types of recreation such as backpacking, horseback riding, upland game hunting and scenic and wildlife photography. Its numerous special wilderness features include high mountain ridges and meadows, habitat for a resident population of bighorn sheep (a candidate for Federal listing under the Endangered Species Act), interesting geologic features (such as the enormous westward tilted Steens-Pueblo fault block which represents the northernmost extension from Nevada of this Basin and Range type of structure), outstanding scenic vistas and a number of special interest plants (including a candidate for Federal listing as threatened or endangered.

Acquisition of the mineral estate of 1,740 acres of split-estate lands would enhance wilderness values by precluding surface disturbances from mineral exploration.

Release of the land not being recommended for wilderness would resolve potential conflicts with other resource uses, including development of new range improvements to resolve livestock management problems, leaving the area available for projected mineral exploration and development. The recommendation for the eastern side of the WSA is nonwilderness because of energy and mineral potential. This portion of the WSA has moderate potential for the occurrence of geothermal resources and high potential for metals in several areas. The proposed livestock range improvements occur along the study area's western boundary and include crested wheatgrass seedings and construction of reservoirs. These developments would provide additional livestock forage and allow for the redistribution of livestock use to offset an existing shortage of available forage in the grazing allotment associated with this WSA.

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[2] This alternative described as the Enhanced Wilderness Alternative in the Final Oregon Wilderness EIS.

[3] This alternative described as the proposed action in the Final Oregon Wilderness EIS (V III, pg 273)

[4] 600 acres of the WSA located in NV will be included in future NV BLM Wilderness legislation. 72,090 acres located in OR will be included in future OR BLM Wilderness legislation.

The recommendation would allow the development of one spring, three reservoirs, 5 miles of pipeline, 26 miles of fence and 3,140 acres of seeding for range developments necessary to improve range conditions. These developments would not be possible under an all wilderness designation.

The recommendation would also allow the development of silver, mercury and gold from two projected mines in the portion of the WSA not recommended for wilderness.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres	
	OR	NV	TOTAL
BLM (surface and subsurface)	68,710	600	69,310
Split Estate (BLM surface only)	3,380	0	3,380
Inholdings	0	0	0
Total	72,090	600	72,690
Within the Recommended Wilderness Boundary			
BLM (within WSA)	23,810	600	24,410
BLM (outside WSA)	0	0	0
Split Estate (within WSA)	1,740	0	1,740
Split Estate (outside WSA)	0	0	0
Total BLM Land Recommended for Wilderness	25,550	600	26,150
Inholdings[5]	0	0	0
Within the Area Not Recommended for Wilderness			
BLM (surface and subsurface)	44,900	0	44,900
Split Estate (BLM surface only)	1,640	0	1,640
Total BLM Lands Not Recommended	46,540	0	46,540
Inholdings	0	0	0

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

Wilderness Characteristics

A. **Naturalness:** The Pueblo Mountains WSA is in a natural condition. The unnatural developments of the WSA are not substantially noticeable within the study area as a whole. Because the steep topography of much of the WSA precludes development in many locations and because the diversity of the landscape screens many of the developments, the unnatural influences on the natural quality of the study area are slight.

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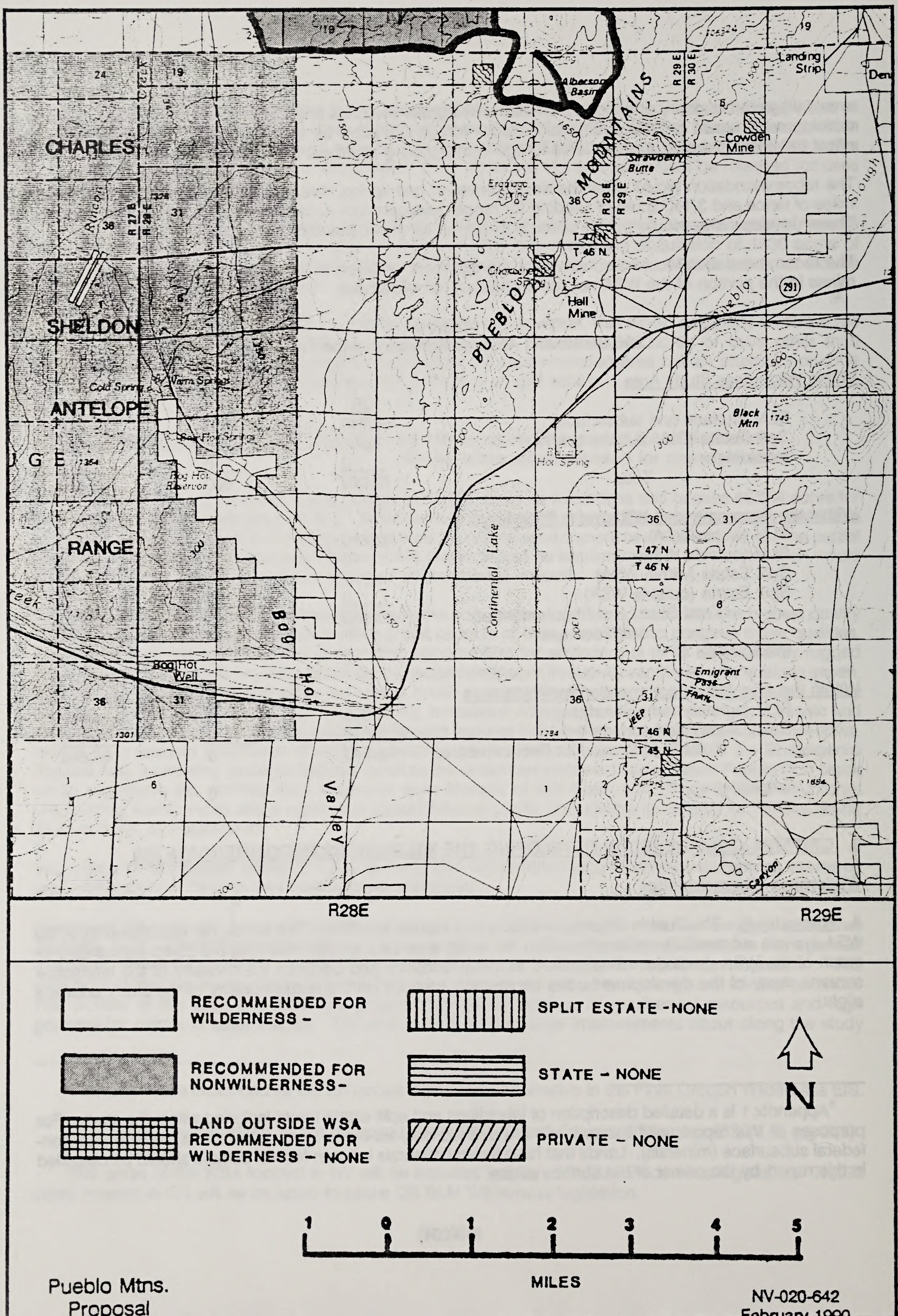
[5] Appendix 1 is a detailed description of inholdings and split estate tracts included within the study. For purposes of this report, split estate lands are defined only as those lands with federal surface and non-federal subsurface (minerals). Lands that have federal minerals but non-federal surface should be classified in this report by the owner of the surface estate.



Pueblo Mtns.
Proposal

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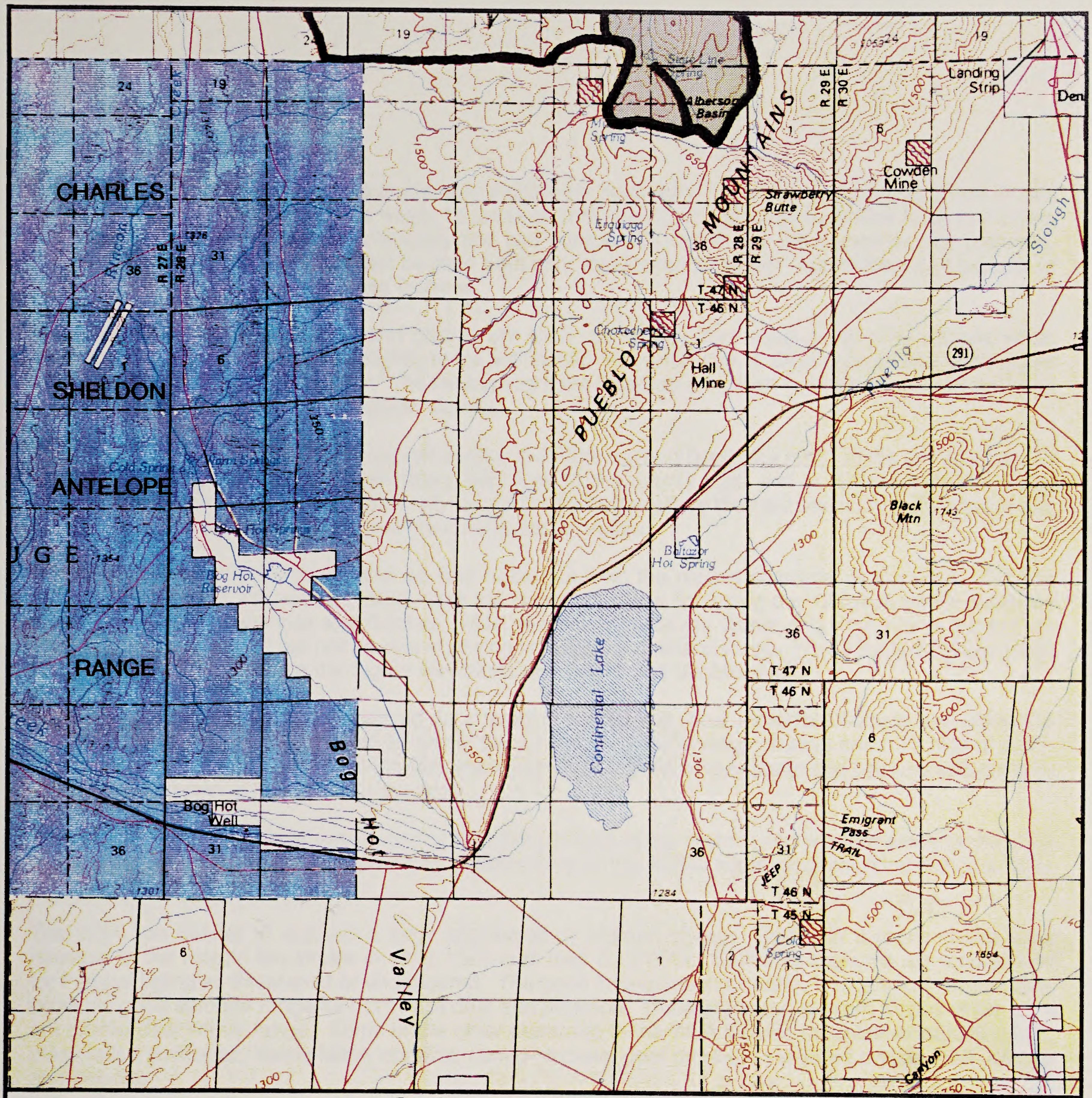


▨ RECOMMENDED FOR WILDERNESS -

☐ RECOMMENDED FOR NONWILDERNESS-

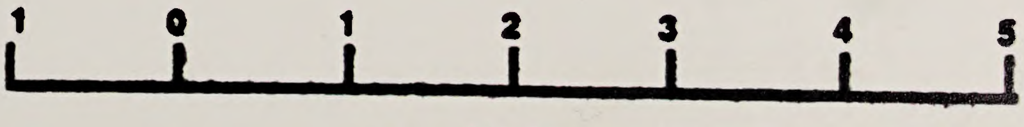
▦ LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE

▥ SPLIT ESTATE - NONE

▤ STATE - NONE

▧ PRIVATE - NONE

N



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Pueblo Mtns.
Proposal

NV-020-642
February 1990

Unnatural developments within the study area include six reservoirs, six developed springs, three fences totaling 4 miles, 33 miles of vehicle ways, 18 areas of past mining activity, one powerline totaling 4 miles, four ditches totaling 4 miles, one cemetery and two dumps. Generally, the developments are scattered, screened by the topography, and can be seen from only small localized areas. Approximately 4 percent of the study area is influenced by these features.

The reservoirs, developed springs and ditches are each visible only from small areas. The ditches, when maintained in the future, would be slightly more noticeable. The water tank is silver colored and quite visible but could be painted a darker color. The mining scars are localized and often screened by topography, so they are visible only from the immediate vicinity.

The powerline runs adjacent to the paved county road (the eastern boundary road) in the lowlands and is only visible along the road. The cemetery lies close to the county road and is not a substantial visual disturbance. The vehicle ways are generally located in drainages where they are seen only from small areas. In addition, many of the ways are overgrown and barely visible.

Developments outside the study area do little to detract from the natural character of the WSA. Outside developments which influence the study area are boundary roads (including the 12 roads which penetrate the WSA), fences, powerlines and ranches. Most of these features are visible only from points around the perimeter of the area and are not an overwhelming influence on the landscape. Those developments which are occasionally visible from the higher elevations are distant and unobtrusive.

Naturalness would be slightly enhanced as a result of eliminating most motorized vehicle use within the 26,150 acres of WSA recommended for wilderness. Closure of 10.75 miles of ways and 0.75 mile of dead-end road in the area recommended for wilderness would allow them to revegetate and become substantially unnoticeable in two to five growing seasons.

The naturalness of Pueblo Mountain and substantial portions of the eastern and western areas of the WSA would be subject to disturbance from other resource uses on the 46,540 acres recommended as nonsuitable for wilderness.

The WSA has habitat to support a large population of bighorn sheep. California bighorn sheep were released in the Pueblo Mountains in 1976, 1980 and 1983 by ODFW. California bighorns are a candidate for Federal listing as threatened or endangered. The good interspersion of water, forage and thermal cover provides good summer range for both mule deer and antelope. The eastern and western slopes of the WSA are crucial deer winter range. Some of the other mammals in the WSA include mountain cottontail rabbit, black-tailed jackrabbit, bushy-tailed woodrat, canyon mouse, deer mouse, long-eared myotis (bat), coyote and bobcat.

Chukars are abundant in the rocky canyons and rimrock found over much of the area. Sage grouse, found near some of the meadows and low sagebrush flats, such as 10 Cent Meadow, are a candidate for Federal listing as threatened or endangered. Valley quail are found near brushy drainages. A large variety of songbirds also exist in this WSA.

Reptiles that exist in the WSA include sagebrush lizards, side-blotched lizards, western rattlesnakes and bullsnakes. These species are found throughout the entire WSA.

Whitehorse cutthroat trout, a candidate for Federal listing as threatened or endangered, were released in Van Horn Creek and Denio Creek in 1976 and 1980. They have become established in 2.5 miles of Van Horn Creek and 0.2 mile of Denio Creek in the WSA and another mile of Denio Creek outside the WSA.

The Riding's satyr butterfly (Neominois ridingsii) was recently report on the Pueblo Mountains.

B. Solitude: Pueblo Mountains WSA has outstanding opportunities for solitude due to the large size, configuration and topography of the area. The Pueblo Mountains' diverse landscape includes rugged ridges with steep escarpments, high-elevation basins and meadows, and deeply cut drainages. All of these physical features enhance the opportunities for solitude within the area and provide numerous settings for a visitor to find seclusion.

Vegetative screening, sufficient to enhance solitude, is limited to portions of the drainages, meadows and spring areas. Vegetation such as aspen, cottonwood, alder, willow and chokecherry provide some screening in the wetter locations, while mountain mahogany occurring in the higher meadows and east-facing slopes in the central part of the WSA also provides some screening.

C. Primitive and Unconfined Recreation: Outstanding opportunities for primitive and unconfined types of recreation in the Pueblo Mountains WSA include day hiking, backpacking, hunting, horseback riding, sightseeing, wildlife viewing and photography. The high quality of these activities is largely due to the abundance and attractiveness of the area's physical features.

The drainages and steep slopes around the perimeter of the WSA provide the best opportunities for day hikes. The drainages (primarily those on the eastern side) also provide access to the interior of the study area for longer backpacking and horseback riding trips. Opportunities for sightseeing and photography can be found throughout the WSA and range from vast distant views from the summit of Pueblo Peak and the western ridge to more localized viewing of waterfalls in the upper reaches of Cottonwood Creek and the numerous wild flowers.

Opportunities for hunting and viewing wildlife are also available within the study area. Mule deer and upland game birds (chukar, quail and dove) are the most commonly hunted species, while numerous nongame types of wildlife are frequently visible throughout the area.

Winding through the central portion of the study area for 11 miles is the Pueblo Mountain segment of the Desert Trail. The trail has been marked and designated in the Pueblo Mountains through a cooperative venture between Desert Trail Association (a private organization), the Parks and Recreation Division of the State of Oregon, and BLM. BLM and the Desert Trail Association have joined in a Cooperative Management Agreement (CMA) to share responsibilities for maintaining this portion of the trail and developing other portions. The trail is part of the Oregon State Recreation Trails System.

D. Special Features: The Pueblo Mountains WSA contains several special features which contribute to the value of the area as wilderness. These include distinctive geological, botanical, wildlife and scenic qualities.

Geological features include the enormous westward-tilted fault block, of which the Pueblo Mountains form the southern part. This is an impressive example of the Basin and Range type of structure which covers much of Nevada. It is characterized by a series of parallel fault blocks forming elongated mountain ranges and broad, intervening valleys. The Steens-Pueblo fault block represents the northernmost extension of this type of structure.

Another interesting geological feature is the pre-Tertiary rocks in the southern part of the WSA which are exposed along the eastern front of the block. Except for a small outcrop in the Trout Creek Mountains, these are the only rocks of their kind in southeastern Oregon and are the oldest as well. They outcrop from the east slopes near Arizona Creek to Denio, Nevada. Also present are pre-Tertiary granitic rocks which are exposed in the southernmost part of the WSA, about 1.5 miles northeast of Denio. They represent an intrusive igneous body which is somewhat younger than the nearby metamorphic rocks.

On the eastern side of the WSA, extending from the fault block, another type of geologic formation can be seen. This is a metamorphosed conglomerate, consisting of large gravels and cobbles which have been compressed and compacted to form resistant outcrops. The metamorphosed conglomerate is younger than the Tertiary lavas but older than gravel deposits on the valley floor. It has been uplifted and deformed as part of the Pueblo-Steens fault block.

Vegetation occurring in the WSA is a special feature because of the presence of six plant species of special interest and because of the RNA portion of the study area which contains uncommon plants and a narrowleaf cottonwood/Mormon tea community.

The presence of bighorn sheep, a candidate for Federal listing under the Endangered Species Act, and the presence of sage grouse, also a candidate for Federal listing under the Endangered Species Act, and crucial deer and antelope winter range makes wildlife values a special feature of the WSA. The study area also provides habitat for a native species of trout. The Whitehorse cutthroat trout, another candidate for Federal listing under the Endangered Species Act, has been restocked into its assumed native habitat in Van Horn Creek. This species is found only in a few streams other than Van Horn Creek and Denio Creek in the Pueblo Mountains, including the larger streams which drain the eastern side of Steens Mountain and two drainages in the Trout Creek Mountains.

The Alvord chub, an Oregon Species of Special Concern, as listed in the Oregon Natural Heritage Database, is found in a number of springs and desert streams in Pueblo Valley. The streams in the Pueblo Mountain WSA which drain the eastern side of the Pueblo Mountain range and provide habitat for this small fish are lower reaches of Willow Creek, Cottonwood Creek, Arizona Creek, Colony Creek, Van Horn Creek and Denio Creek.

The outstanding scenery of the study area is another special wilderness feature. The high quality scenic area includes most of the central portion of the WSA and consists of the western slope of the eastern ridge, the western ridge, and the high basins and meadows in the interior.

Diversity in the National Wilderness Preservation System (NWPS)

A. **Assessing the diversity of natural systems and features as represented by ecosystems:** Wilderness designation of this WSA would add ecosystems (Bailey-Kuchler) not presently represented in Oregon, and represented in the National Wilderness Preservation System by six (6) areas. However, there are no areas in the NWPS that have both ecosystems as represented in this WSA. There are 86 other BLM areas in the State under study with these two ecosystems, however, there are other WSAs in the state with both of these ecosystems present. The information is summarized in Table 2.

The WSA contains seven ecosystems listed in the Basin and Range section of the Oregon Natural Heritage Plan. These include big sagebrush/bluebunch wheatgrass, big sagebrush/Idaho fescue, low sagebrush/bluebunch wheatgrass, low sagebrush/Idaho fescue, mountain mahogany community in the southern Basin and Range, narrowleaf cottonwood and Mormon tea community complex and a shadscale-spiny hopsage-budsage community. One ecosystem which occurs in this WSA but is not listed in the Oregon Natural Heritage Plan is three-tip sagebrush/Idaho fescue.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	NWPS Areas Acres	Other BLM Studies Areas	Other BLM Studies Acres
	NATION WIDE			
Intermountain Sagebrush Province/				
Sagebrush steppe	3	76,699	137	4,370,340
Saltbush-greasewood	3	45,553	44	1,175,920
	OREGON			
Sagebrush steppe	0	0	67	1,983,074
Saltbush-greasewood	0	0	19	568,667

B. **Expanding the opportunities for solitude or primitive recreation within a day's driving time (5 hours) of major population centers:** The WSA is within a five hour drive of two major population centers. Table 3 summarizes the number and acreage of destination areas and other BLM study areas within 5 hours drive of the population.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
Idaho				
Boise	16	4,741,570	141	5,347,290
Nevada				
Reno	45	4,967,230	175	6,904,809

C. **Balancing the geographic distribution of wilderness areas:** Within a 50-mile radius there are 25 existing BLM Wilderness Study Areas within Oregon. Of those, 15 WSAs are recommended for wilderness designation in whole or in part while the remaining 10 WSAs are recommended as nonsuitable for wilderness. There are currently no designated wilderness areas within the given radius.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the Pueblo Mountains WSA recommended for wilderness designation can be managed as wilderness to preserve values present in the area. There are no manageability problems expected under the proposed action, since acquisition of 1,740 acres of split-estate lands and road closures would eliminate potential manageability conflicts. There would be no vehicles on the dead-end roads within the area, and no potential or need for the development of access to the split-estate land.

The proposed action is a new alternative designed to reconcile major conflicting concerns and permit acceptable multiple uses. In this alternative, manageability would be enhanced by excluding approximately 2,215 acres of private land, not closing 4 miles of roads and 22.25 miles of ways which would be difficult to enforce, and by placing the boundary at a higher elevation on the west and south sides of the area. Vehicles would be unable to enter the remainder of the WSA because of steep terrain.

The part of the WSA not recommended for wilderness designation (46,540 acres) is manageable as wilderness, but management would be difficult.

The roads and ways outside of the new proposed boundary are used extensively by both deer and bird hunters during the fall. These roads and ways are also used by ranchers for livestock management. These activities include hauling horses and placing salt.

Establishing the boundary line at the 6,000-foot level would exclude an area of private land and related on-going mineral activity in the south end of the WSA and all of the western foothills of the western ridge where the majority of the range developments are proposed.

Within the present WSA boundary six inventory errors exist. These errors include three water ditches located in three different areas along the boundary: T. 41 S., R. 35 E., middle of Sections 7 and 8; another at T. 40 S., R. 34 E., middle of Section 2; and T. 40 S., R. 34 E., middle of Section 31. Other errors include a high voltage powerline located on the eastern boundary that is within the WSA and parallels the county road for approximately 6 miles. The powerline is between Red Point School and the town of Denio. A buried pipeline is located on the extreme southeastern boundary of the WSA at T. 41 S., R. 35 E., Section 20 NW corner. The last inventory error is located along the southeastern boundary adjacent to the town of Denio. A corner of the town's cemetery is located at T. 41 S., R. 35 E., Section 20 within the WSA. The proposed recommendation would eliminate inventory errors by placing them outside the wilderness boundary.

Energy and Mineral Resource Values

The U.S. Geological Survey and Bureau of Mines prepared a mineral assessment for the Pueblo Mountains WSA in 1987.[6] Additional information was obtained by BLM through a geochemical survey under contract with the Oregon Department of Geology and Mineral Industries (DOGAMI). Technical details of the evaluation are included in a BLM report titled, "Assessment of Geology, Energy, Mineral Resources, Pueblo Mountains Geologic Resource Area, Harney County, Oregon." In order to arrive at the following information on energy and mineral resources, the District Geologist examined all existing data and documents on this WSA, which included the U.S. Geological survey Bulletin 1740-B on Pueblo Mountains WSA and the Oregon Department of Geology and Mineral Industries (DOGAMI), and compiled the information as Is shown. For further information other than that shown in this report see the pertinent documents as indicated.

The WSA is within the Pueblo Mountains geologic resource area which has been classified according to a rating system that indicates both the potential for occurrence (geologic favorability) of certain minerals, as well as the quantity and quality of data on which the classification is based (confidence level). A description of the rating system is provided in the Statewide EIS volume.

The northern part of the WSA is within an area that has been nominated as an Area of Critical Mineral Potential (ACMP) and is considered to have potential for the occurrence of gold and mercury.

The eastern and southeastern portions of the study area have moderate potential for the occurrence of geothermal resources. Oil and gas resources have low potential for occurrence. As of October 16, 1987, there were no geothermal or oil and gas leases in the Pueblo Mountains WSA.

Based on abundant direct evidence, a large potion of the WSA has a high potential for occurrence of copper, gold, mercury, molybdenum and silver. A smaller area in the northeastern area of the WSA containing rocks adjacent to the Pueblo Caldera Ring Fault also has a high potential for occurrence of uranium and zinc. The area had 53 mining claims as of October 16, 1987.

Impacts on Resources

The following comparative impact table (Table 4) summarizes the effects on pertinent resources for all the alternatives considered, including designation and nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action Partial Wilderness	All Wilderness Alternative	All Wilderness (Enhanced) Alternative	Partial Wilderness Alternative	No Wilderness No Action Alternative
Impacts on Wilderness Values	Wilderness designation of 26,150 acres would protect and probably enhance existing wilderness values. Within the 46,540 acres not designated, projected activities would impair wilderness directly or indirectly on approximately 30,000 acres over the long-term due to mining, vegetative manipulations and vehicle use.	Wilderness designation of the entire 72,690 acres within the WSA would result in the protection and probable enhancement of existing wilderness values.	Wilderness designation of 77,800 acres (assuming acquisition of 3,910 acres of private lands) would protect and enhance existing wilderness values. The acquisition of 3,875 acres of mineral estate split-estate lands would further enhance the total area by preserving wilderness values on all lands within the wilderness boundaries.	Wilderness designation of 43,245 acres (assuming acquisition of 1,930 acres of private lands) would protect and enhance existing wilderness values. Within the 31,375 acres not designated, projected activities would impair wilderness directly or indirectly on approximately 29,000 acres over the long-term due to mining, vegetative manipulations and vehicle use.	In the absence of wilderness designation, projected activities and continued use would directly and indirectly impair wilderness values on approximately 32,000 acres with further declines from other potential uses over the long-term.

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[6] Mineral Resources of the Pueblo Mountains Wilderness Study Area, Harney County, Oregon, and Humboldt County, Nevada; U.S. Geological Survey Bulletin 1740-B; 1987.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action Partial Wilderness	All Wilderness Alternative	All Wilderness (Enhanced) Alternative	Partial Wilderness Alternative	No Wilderness No Action Alternative
Impacts on Energy and Mineral Development	No impact to energy development is expected. Wilderness designation would result in foregone production from a projected silver and gold mine. Production of silver, mercury and gold from two other projected mines could occur in the area not designated.	No impact to energy development is expected since none is projected. Production of silver, mercury and gold from three projected mines would be foregone.	No impact to energy development is expected. Production of silver, mercury and gold from three projected mines would be foregone.	No impact to energy development is expected. Production of silver and gold from one projected mine located in the area recommended for wilderness would be foregone. Production of silver, mercury and gold from two projected mines could occur in the area not recommended for wilderness.	No impact to energy development is expected. Production of gold, silver and mercury from three projected mines could occur.
Impacts on Vegetation	Vegetation would be altered on 3,410 acres while vegetation would be removed on approximately 250 acres. Disturbance created by range and wildlife developments would revegetate as would 11.5 miles of roads and ways closed to vehicle use. The riparian and meadow vegetation in both the recommended and nonrecommended areas would improve and the ecological condition would change from early seral to mid-seral in some areas and from mid-seral to late seral in others.	The 33 miles of closed ways would revegatate within 2 to 3 years. There would be little or no change in the vegetation over the remainder of the WSA.	The 68.5 miles of closed vehicle routes would revegatate within 2 to 5 growing seasons. There would be little or no change in the vegetation over the remainder of the WSA.	Vegetation would be altered on 3,410 acres while vegetation would be removed on approximately 250 acres. 34 miles of vehicle routes would revegetate. The riparian and meadow vegetation in both the recommended and nonrecommended areas would improve and the ecological condition would change from early seral to mid-seral in some areas and from mid-seral to late seral in others.	Vegetation would be altered on 3,410 acres while vegetation would be removed on approximately 250 acres. Disturbance created by other range and wildlife projects would eventually revegetate. The riparian and meadow vegetation in both the recommended and nonrecommended areas would improve and the ecological condition would change from early seral to mid-seral in some areas and from mid-seral to late seral in others.
Impacts on Wildlife	Wildlife habitat and populations would be maintained on 26,150 acres designated as wilderness. Whitehorse cutthroat trout would be reintroduced into upper Denio Creek, but not in upper Van Horn Creek. The construction of in-stream structures in upper Denio Creek would occur, but would be precluded in upper Van Horn Creek. Bighorn sheep would be reintroduced in the Van Horn Creek area. Riparian, fish and sage grouse habitat would improve. Habitat for 50 antelope would also improve, but a reduction of 80 wintering deer and damage to 3,140 acres of nongame species habitat is projected as a result of projected mining activity.	Wildlife habitat and populations would be maintained on 72,690 acres designated as wilderness. Disturbances to wildlife would be greatly reduced by the closure of ways. The reintroduction of Whitehorse cutthroat trout into upper Denio and Van Horn Creeks would not occur as a result of precluding the construction of in-stream structures. Bighorn sheep would be reintroduced in the Van Horn Creek area.	Wildlife habitat and populations would be maintained on 77,800 acres designated as wilderness and disturbances to wildlife would be greatly reduced by the closure of ways. The reintroduction of Whitehorse cutthroat trout into upper Denio and Van Horn Creeks would not occur but bighorn sheep would be reintroduced in the Van Horn Creek area.	Wildlife habitat and populations would be maintained on 43,245 acres designated as wilderness. The reintroduction of Whitehorse cutthroat trout into upper Denio and Van Horn Creeks would not occur but bighorn sheep would be reintroduced in the Van Horn Creek area. Riparian, fish and sage grouse habitat would improve. Habitat for 50 antelope would also improve, but a reduction of 80 wintering deer and damage to 3,140 acres of nongame species habitat is projected as a result of projected mining activity.	Most wildlife habitat species populations could be maintained at present levels over most of the WSA. The proposed reintroduction of Whitehorse cutthroat trout in upper Denio and Van Horn Creeks and the reintroduction of bighorn sheep in the Van Horn Creek area would occur. Cutthroat trout would be improved in both creeks. Riparian, fish and sage grouse habitat would improve. Habitat for 50 antelope would also improve, but a reduction of 150 summering deer, 120 wintering deer, 10 bighorn sheep and damage to 3,140 acres of nongame species habitat is projected as a result of projected mining activity.
Impacts on Watershed	Most of the perennial drainages and meadows in the designated wilderness would begin to stabilize under improved livestock management. Water quality on 7 miles of two perennial streams would be reduced due to projected open-pit mining.	With the exception of Denio Creek, poor water quality and active erosion would continue on the perennial streams and meadows.	All of the perennial drainages and meadows with the exception of Denio Creek would continue to exhibit active erosion and poor water quality.	Water quality would improve on all streams except for 7 miles affected by mining activity. Streambanks would begin to stabilize on about 20 miles of perennial streams. The remainder of the WSA would show little change.	Headcuts in perennial streams and meadows would begin to heal and fecal coliform counts would drop on 57 miles. Projected mining activity would reduce water quality on 13 miles of three perennial streams.
Impacts on Livestock Grazing	Livestock use would remain at the baseline level of 4,430 AUMs as a result of constructed projects. Vehicle use for routine livestock management would be precluded on 10.75 miles of ways and .75 miles of road, causing some inconvenience and additional expense to livestock operators.	Baseline livestock grazing use would be reduced by 795 AUMs. Vehicle use for routine livestock mgmt and fence maintenance on 33 miles of ways would be precluded, with some inconvenience and additional expense to livestock operators.	Baseline livestock grazing use would be reduced by 795 AUMs. Vehicle use for routine livestock mgmt and fence maintenance on 33 miles of ways and 35.5 miles of roads would be precluded, with some inconvenience and additional expense to livestock operators.	Baseline livestock grazing use would be reduced by 170 AUMs. Vehicle use for routine livestock mgmt would be precluded on 24 miles of ways and 5 miles of dead-end roads with some inconvenience and additional expense to livestock operators. Development of range projects in the area not recommended for wilderness would prevent the need for future livestock use reductions of approximately 625 AUMs.	Livestock use would remain at the baseline level of 4,430 AUMs due to constructed projects. Vehicle use for routine livestock management would continue on 33 miles of ways and 17 miles of dead-end roads.
Impacts on Recreation Use	This alternative would result in a net reduction of the area's overall recreation use level from 700 visitor days per year to approximately 500 visitor days per year.	Wilderness designation would result in a net reduction of the area's overall recreation use level from 700 visitor days per year to less than 500 visitor days per year.	Wilderness designation would result in a net reduction of the area's overall recreation use level from 700 visitor days per year to approximately 400 visitor days per year.	This alternative would result in a net reduction of the area's overall recreation use level from 700 visitor days per year to approximately 500 visitor days per year.	The area's recreation use level of 700 visitor days per year would not be substantially affected. Primitive recreation would decline moderately as a result of the projected increase in vehicle oriented recreation and mineral and livestock developments.
Impacts on Personal Income	Annual local personal income would decrease by approximately $2,500.	Annual local personal income would decrease by approximately $12,000.	Annual local personal income would decrease by approximately $13,000.	Annual local personal income would decrease by approximately $4,500.	Annual local personal income would increase by approximately $61,500.

Local Social and Economic Considerations

There were no social issues identified with the study of this WSA.

Livestock use at the current level of 4,430 AUMs and recreation use totaling 700 visitor days per year are the primary resource outputs that generate economic activity in the WSA. Local personal income generated annually from these existing use levels amounts to approximately $53,160 for livestock grazing and $8,400 related to recreation use of the WSA, for an overall total of $61,560. The Statewide EIS volume discusses the term local personal income and how income figures have been derived.

The total effect on local personal income for the recommended wilderness action would be a net decrease of $2,400 per year plus an unknown level of increase attributable to the projected energy and mineral development.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain comments received during the inventory process and early stages of the EIS preparation were used to develop significant study issues and various alternatives for the ultimate management of those lands found to have wilderness values.

During formal public review of the draft EIS, a total of 75 comments specifically addressing this WSA were received. Of those, 64 were written and 11 were oral statements received at the 24 public hearings on the EIS. In general, 45 comments supported wilderness designation for all or part of the WSA. Twenty-five comments supported no wilderness for the WSA, while five comments addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented that the value of wilderness outweighs other values such as mining or grazing and that minerals that are found in the Pueblo Mountains WSA are commonly found elsewhere outside WSAs. Some of those favoring wilderness commented on several of the special features found within the WSA. These included geological features, botanical, wildlife and scenic qualities.

Those opposing wilderness designation were concerned that wilderness would preclude exploration for and development of minerals and would adversely impact the range industry and individual livestock operators. Some of those opposed to wilderness believed that the economy would be adversely impacted if designated as wilderness.

The state of Nevada, State Office of Community Services, does not support the creation of wilderness areas through the closure of roads which have been used historically by Nevada residents for access. The Nevada State Department of Mines has no objections to wilderness designation. The Nevada Division of State Parks is in favor of wilderness designation. Oregon Department of Geology and Mineral Industries states that there are numerous mercury, copper, gold and uranium occurrences and that the area is associated with historic leasing for oil, gas and geothermal resources. The Oregon Department of Fish and Wildlife believes that mineral development in this WSA would have an adverse and irretrievable impact on the big game animal populations. They favor wilderness and propose additional acreage. Harney County, County Court for Harney County, and the Burns Paiute Reservation all favor a partial wilderness designation of the existing WSA. Their recommendation is similar to BLM's recommendation.

There were three comment letters received on the Final EIS specific to this WSA. Two supported the all wilderness proposal for the WSA and one opposed certain road closures in the WSA.

APPENDIX 1

ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION[7]

Legal Description	Total Acreage	Number of Owners	Type of Ownership by Estate		Presently Proposed for Acquisition	Preferred Method of Acquisition	Estimated Costs of Acquisition[8]	
			Surface Estate	Sub-Surface Estate			Land	Processing
Parcel #1 T.39S., R.34E., MDM Sec. 16, SE & NW	320	1	Federal	NonFederal	No	Exchange		$3,750
Parcel #2 T.40S., R.34E., MDM Sec. 16	640	1	Federal	NonFederal	No	Exchange		$3,750
Parcel #3 T.40S., R.34E., MDM Sec. 36	640	1	Federal	NonFederal	No	Exchange		$3,750
Parcel #4 T.41S., R.34E., MDM Sec. 16, SENE, NESE, SESE	120	1	Federal	NonFederal	No	Exchange		$3,750

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[7] The estimated costs listed in this Appendix in no way represent a formal appraised value of the land or mineral estate, but are rough estimates based upon sales or exchanges of lands with similar characteristics to those included in the WSA. The estimates are for the purpose of establishing a range of potential costs to the government of acquiring non-federal holdings and in no way represents an offer to purchase or exchange at the cost estimates included in this appendix. Processing costs are all miscellaneous expenses other than land costs. These include workmonth costs, appraisals, title work, escrow costs, etc.

[8] Only administrative costs are shown for exchanges.

DISASTER PEAK WILDERNESS STUDY AREA

1. THE STUDY AREA - 32,040

The Disaster Peak Wilderness Study Area (WSA OR-3-153/NV-020-859), located in both Nevada and Oregon, is southern-most in a group of five WSAs known collectively as the Trout Creek Combination. The WSA lies in the west-central Trout Creek Mountains at the headwaters of Kings River and McDermitt Creek. It contains a portion of the main north-south ridgeline of the Trout Creek Mountains, a number of stream valleys and rolling sagebrush hills. It has a very irregular horseshoe shape, and is approximately 10 miles long and 8 miles wide. The WSA shares a boundary with the Willow Creek WSA (OR-3-152).

The geologic landmark known as Disaster Peak is a large, symmetrical butte that is visible throughout the region. The western-most portion of the WSA incorporates part of an area known as The Granites, named after the abundance of Cretaceous granitic outcrops that appear at the base of the predominantly volcanic ridgeline.

The WSA contains land in BLM's Winnemucca, Nevada district, and Vale and Burns, Oregon, districts. Total public land in the WSA is 32,040 acres; 18,840 acres in Oregon and 13,200 acres in Nevada. Within the study area is a 40-acre private parcel, and it includes 1,550 acres of split estate land which is located in the north (Oregon) half of the WSA. The private parcel and the split estate lands are also in Oregon. The boundary follows BLM roads and private land boundaries.

The Trout Creek Mountains are an uplifted and tilted geologic block with a steep escarpment along the southern and eastern extent of the range. Within the portion of the WSAs south of the range lies a collapsed volcanic dome called the McDermitt Caldera. The Quinn River Valley lies to the east of the range and the Pueblo Valley lies to the west. The Trout Creek range tilts to the north and precipitation drains into the playa of the Coyote Lake Basin. The Disaster Peak WSA sits along the northwest rim of the McDermitt Caldera, forming part of the divide that separates the Coyote Lake Basin in Oregon from the Humboldt Basin in Nevada.

The WSA was studied under Section 603 and 202 of the Federal Land Policy and Management Act (FLPMA), and was included in the Final Oregon Wilderness Environmental Impact Statement (EIS) published in December 1989. Four alternatives for the complex were analyzed in the EIS: 1) an all wilderness alternative in which each of the five WSAs would be recommended for wilderness and managed as separate wilderness areas; 2) an all wilderness alternative that includes combining the five WSAs and recommending them for designation as a single wilderness area and acquiring private inholdings totaling 3,960 acres and the mineral estate of the 10,295 acres of split estate land, making the total area recommended for wilderness under this alternative 190,585 acres[9]/; 3) a partial wilderness alternative (described below), which is the recommendation in this report, and 4) a no wilderness alternative. The lands within Nevada are shown on Maps 1 & 2.

Under the partial wilderness alternative, portions of two WSAs (Willow Creek and Disaster Peak) would be combined, and a portion of Twelvemile Creek WSA, and all of Oregon Canyon and Fifteenmile WSAs would be combined. Only the Disaster Peak WSA contains lands in Nevada. These two combinations would be separated by a road. A total of 180,440 acres of public land in the WSAs (including 12,103 acres of the Disaster Peak WSA in Nevada) would be recommended for wilderness. This includes acquiring 3,960 acres of private inholdings and the mineral estate of the 9,465 acres of split estate land (all in Oregon), if the owners are willing, and adding 1,230 acres of public land outside of the WSAs (all in Oregon). A total of 10,145 acres in the WSAs would be recommended for uses other than wilderness. A total of 1,097 acres of the nonwilderness portion of the Disaster Peak WSA are located in Nevada.

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[9] This alternative was called the Enhanced Wilderness Alternative in the Final Oregon Wilderness EIS.

2. RECOMMENDATION AND RATIONALE - 31,170 acres recommended for wilderness
2,400 acres recommended for nonwilderness[10]

The recommendation for this WSA is to designate 31,170 acres as wilderness and release 2,400 acres for uses other than wilderness. Receiving wilderness designation would be 28,290 acres of public land; 1,280 acres of private land; the mineral estate of 1,450 acres of split estate land which would be required through purchase or exchange, and an additional 150 acres of non-WSA public land adjacent to the Disaster Peak WSA. Twenty-four hundreds (2,400) acres in the eastern and southern portions of the WSA would be released for uses other than wilderness; 2,200 acres of public land and 200 acres of spit estate land in Oregon. The dirt boundary road between Disaster Peak and Willow Creek WSA to the north would be closed, combining these two areas. Several dead-end dirt roads extending in from the boundary road would also be closed.

The all wilderness alternative with acquisitions is the environmentally preferred alternative since it will result in the least change from the natural environment over the long term. However, the partial wilderness alternative would be implemented in a manner which would use all practical means to avoid or minimize environmental impacts.

In the area recommended for wilderness, the recommendation acknowledges high wilderness values which outweigh projected mineral development which would be foregone. In the portion recommended for uses other than wilderness, the recommendation would allow for projected mineral development. The southern and eastern extensions which possess limited wilderness values that are considered unmanageable for wilderness also form part of the area not recommended.

Wilderness designation of 31,170 acres would protect and enhance existing wilderness values. Special features would be protected include Lahontan cutthroat trout, which is Federally listed as threatened in Nevada, Lahontan redside shiner, habitat for mule deer, sage grouse, antelope; cultural sites, and outstanding ecological diversity, scenery and geologic formations. This area contains great topographic and ecological diversity. The rugged canyons, dramatic spires, extensive badlands, broad valleys and unusual vegetative composition combine with excellent solitude and primitive recreational opportunities to comprise a WSA with very high wilderness values.

Acquisition of the 1,450 acres of mineral estate and 1,280 acres of private land would prevent projected disturbance from energy and mineral exploration and ensure the preservation of naturalness and opportunities for solitude. Naturalness would be enhanced from the closure of 7 miles of boundary roads, all eight of the dead-end roads in the WSA which total approximately 10 miles and 17 miles of ways. Closure of the ways to motorized vehicle use would allow the landscape to return to a more natural condition through revegetation.

A new, permanent range improvement project that involves construction of 2 miles of pasture fence adjacent to McDermitt Creek would temporarily impair solitude, but over the long-term would enhance wilderness values by protecting natural habitats and allowing riparian areas to recover from grazing pressure. Riparian areas would be fenced except for small watergaps. The reduced grazing impact to aquatic and riparian habitats and upland communities would improve these areas' natural appearance. By excluding vegetation, increased forage for wildlife due to improved management and recovery of vegetation, and improved scenic quality. Fish populations would be expected to increase somewhat due to improved water quality and reduced impacts on habitat. Wildlife habitat for mule deer, antelope and the area's nongame species would be improved primarily due to the closure of 17 miles of ways and 17 miles of roads. This action would substantially reduce vehicle disturbances including habitat losses and wildlife displacement related to projected mineral exploration of split-estate and private lands.

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[10] This report describes the recommendation for the 13,200 acres of the Disaster Peak WSA which are located in Nevada. The Oregon Wilderness Study Report will discuss the recommendation for the portion of the Disaster Peak WSA in Oregon as a part of the Trout Creek Combination WSA. For this reason, the reports for these states will not be identical.

A total of 2,400 acres of public land would be recommended for uses other than wilderness to allow for exploration for geothermal and mineral resources, which would cause short-term impacts to wilderness values, and to allow for development of an open-pit gold mine in an Area of Critical Mineral Potential including a milling/leaching complex in the east-central portion which would impair wilderness values on 800 acres over the long term. On a long-term basis, the gold mine would impair naturalness on approximately 3,000 acres, impair solitude for visitors in adjacent areas and primitive recreation opportunities in the vicinity of the mine. In addition, a way of approximately 1 mile in length would remain open in the area not recommended for wilderness.

Also included in the nonwilderness area is an extension of the WSA that has limited wilderness values and would be difficult to manage as wilderness. A small extension from the main part of the WSA results in a poor configuration and limits opportunities for solitude and primitive and unconfined types of recreation. Frequent contact between visitors is likely to occur in this southern-most extension. Management for wilderness would be difficult given topography, vegetative cover and configuration.

Table 1
Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres	
	OR	NV	TOTAL
BLM (surface and subsurface)	17,290	13,200	30,490
Split Estate (BLM surface only)[11]	1,550	0	1,550
Inholdings	40	0	40
Total	18,880	13,200	32,080
Within the Recommended Wilderness Boundary			
BLM (within WSA)	16,187	12,103	28,290
BLM (outside WSA)	150	0	150
Split Estate (within WSA)	1,350	0	1,350
Split Estate (outside WSA)	100	0	100
Total BLM Land Recommended for Wilderness	17,787	12,103	29,890
Inholdings (State/private)[12]	40	0	40
Private Recommended for Acquisition (inholding in OR complex not Disaster Peak WSA)	1,240	0	1,240
Within the Area Not Recommended for Wilderness			
BLM (surface and subsurface)	1,103	1,097	2,200
Split Estate (BLM surface only)	200	0	200
Total BLM Lands Not Recommended	1,303	1,097	2,400
Inholdings	0	0	0

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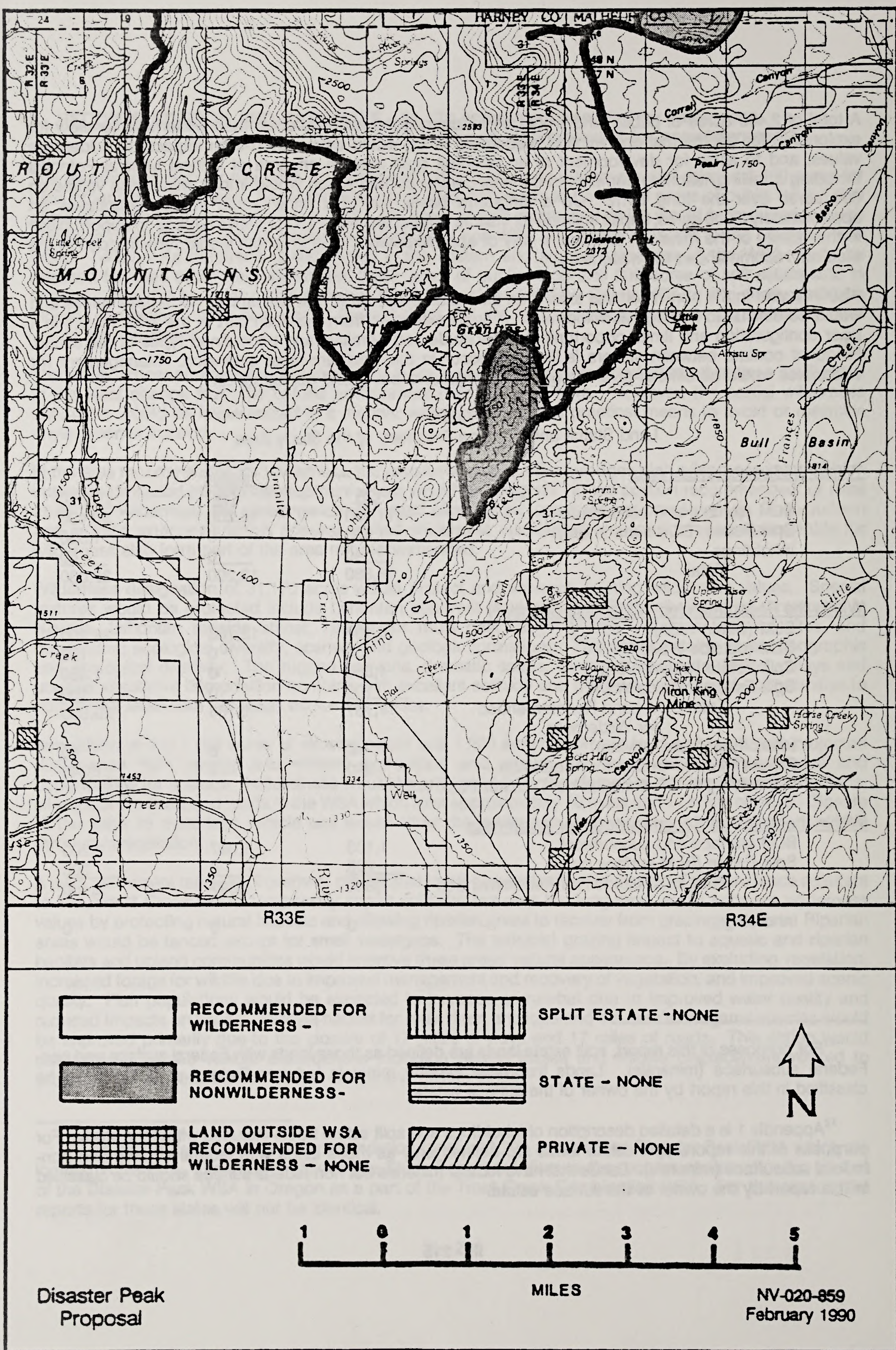
[11] For purposes of this report, split estate lands are defined as those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface should be classified in this report by the owner of the surface estate.

[12] Appendix 1 is a detailed description of inholdings and split estate tracts included within the study. For purposes of this report, split estate lands are defined only as those lands with federal surface and non-federal subsurface (minerals). Lands that have federal minerals but non-federal surface should be classified in this report by the owner of the surface estate.



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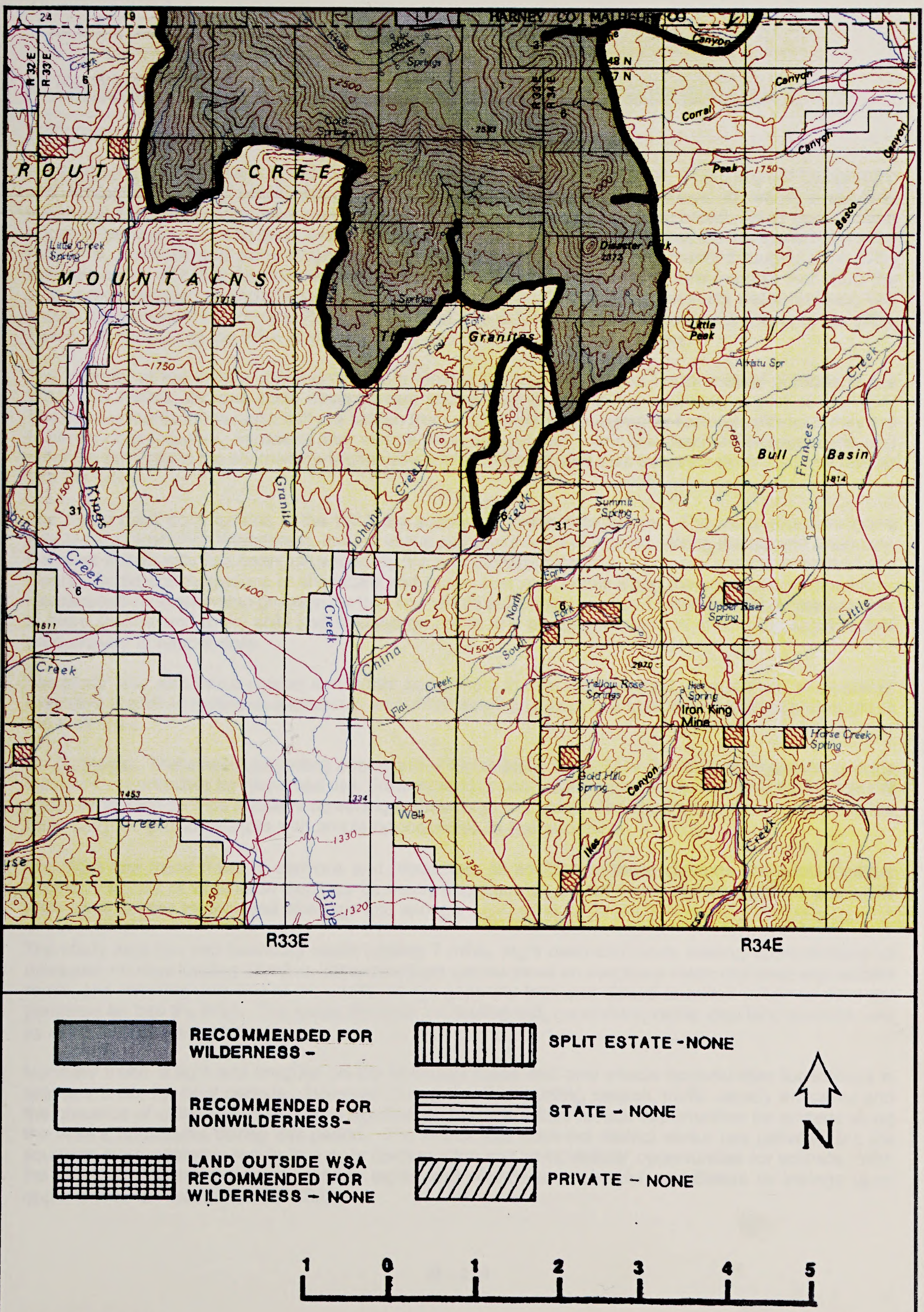

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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

Wilderness Characteristics

A. Naturalness: The Disaster Peak WSA exhibits a generally natural character. There is great topographic and ecological diversity which ranges from high mountain elevations to valleys, all within a semiarid sagebrush steppe environmental zone. The WSA's diverse terrain ranges from broad, flat to gently rolling ridges at lower elevations to deep, wide, steep-walled canyons. The canyon slopes are composed of broken rock rims, outcrops and scree slopes. Topography screens interior developments throughout the WSA because nearly all of the developments are in draws or basins. Thirty-one unnatural features that affect the study area's naturalness include six fences, 16 ways totaling 18 miles, seven livestock water projects, one shown measurement station near Peak Canyon, and one cabin located in the northeast corner of the WSA. Twenty-six percent of the WSA is visually influenced by these unnatural features.

The majority of the interior developments are located in the northern and north- central portions of the WSA. Six fences and one snow measurement station are located in the southern region of the WSA. The developments in the north half are hidden from each other by topographic features, although they are relatively close together. Intrusions from vehicle travel on boundary roads and dead-end access roads, and ranching activities to the southeast are generally brief and distant, and their influence does not penetrate far into the WSA.

The major plant communities in the WSA are sagebrush/grass ecosystems. The most abundant grass species are Bluebunch Wheatgrass, Idaho Fescue and Sandberg's bluegrass. Along the eastern boundary, the plant community has been influenced by fire and consists primarily of grasses and other herbaceous plants. Some concentrations of shadscale and Indian ricegrass occur along the southeastern boundary. Herbaceous vegetation also grows in the lava flow where soil pockets occur. Low sagebrush is predominant in more shallow and rocky soils and is found on ridges and on open slopes. Wyoming big sagebrush is predominant in deeper soils.

The study area also has a greater shrub/tree component than is usually found in sagebrush ecosystems. Extensive stands of mountain mahogany, and cottonwood and alder tree species are common throughout the drainages.

B. Solitude: There are outstanding opportunities for solitude; the WSA's size and configuration provide excellent opportunities for dispersed use. Visitors tend to use natural travel corridors along the bottoms of major vegetation provide excellent screening in these high use areas. The short tributary drainages into the main canyons provide visitors with ample opportunities to find seclusion.

The WSA has many miles of canyons and tributaries. In addition to these canyons and tributaries are extensive stands of vegetation that may be nearly impenetrable except where numerous game and cattle trails allow access to enclosed clearings and springs.

The study area has two boundary roads totaling 7 miles, eight dead-end roads totaling approximately 10 miles and 16 ways totaling 18 miles. Intrusions from vehicle travel on boundary roads and dead-end access roads, and ranching activities to the southeast are generally brief and distant and their influence does not penetrate far into the WSA. The roads are used for hauling salt, supervising cattle, checking projects, and as access by recreationists.

Normally traffic is light and irregular on the boundary roads and only affects opportunities for solitude in adjacent areas for brief periods. However, during the deer hunting season, traffic usually increases and the presence of other visitors becomes significant. These activities reduce opportunities for solitude along the WSA's boundaries during this period. The WSA's size does not restrict visitor use patterns, but the southern-most extension results in a poor configuration and limits visitors' opportunities for solitude. With the exception of this extension, outside sights and sounds are too brief and distant to infringe upon opportunities for solitude in the WSA.

C. **Primitive and Unconfined Recreation:** With the exception of the narrow configuration of the southern-most boundary extension of the WSA, the study area provides outstanding opportunities for primitive and unconfined recreation. Water and campsites are abundant. Available recreation opportunities include day hiking, backpacking, camping, hunting , fishing, sightseeing, photography and winter sports (cross-country skiing and snow shoeing). The major canyons provide many hiking and backpacking routes which vary in distance and difficulty.

Much of the vehicle use and recreation activities now occurring in the WSA are associated with hunting. Hunting access is dispersed along the boundary roads and ways of the WSA. However, hikers and other recreationists enter the WSA from the Trout Creek Mountain Road to the west; the country road that parallels McDermitt Creek to the south, and some access occurs from Kings River Road in the southwest. Approved vehicle designations currently restrict off-road in Nevada that is open to ORVs. Trophy mule deer and other game species may be hunted. Native trout can be found in Sage Creek and Line Canyon drainages. Rainbow trout can be found In Kings River, and brown trout, brook trout and rainbow trout hybrid can be found in Kings River, and brown trout, brook trout and rainbow trout hybrid can be found in McDermitt Creek. Total recreation use in the WSA is approximately 1,200 visitor days per year.

In the area not recommended for wilderness, the WSA's, the WSA's southern-most extension is narrow and does not provide outstanding opportunities for primitive and unconfined recreation.

D. **Special Features:** Outstanding scenery is available in the WSA because of the geologic landmark of Disaster Peak and dramatic topography that is expressed in prominent cliffs, spires and massive rock outcrops. The area around Disaster Peak and in The Granites portion in Nevada exhibits volcanic and granitic formations that have eroded into extensive badlands. Due to the wide variety of environmental conditions that result from the range in elevations (roughly 6,500 to 8,000 feet), vegetative communities are diverse and range from sagebrush/grass communities to extensive stands of mountain mahogany at higher elevations. Sage grouse, a Federal candidate for listing in Oregon under the Endangered Species Act, inhabits the WSA in areas with a good mixture of low sage, bug sage and mountain meadows. Mule deer habitat within the WSA is also excellent because of well distributed forage, water and cover. The Oregon Department of Fish and Wildlife has managed the study area as a trophy mule deer management area by limiting hunting. Limited stands of alder and willow also supply key cover and forage in canyon environments.

Native populations of Lahontan cutthroat trout are present in the Sage Creek and Line Canyon drainages of the WSA. This species is Federally listed as threatened in Nevada and is native to the Lahontan Basin, which is part of the Humboldt Basin. The Nevada goal for the Lahontan cutthroat is to maintain its genetic purity, and eventually remove it from the Federal list by expanding populations and improving habitat. This population is among the few remaining physiological adaptation of this species is valuable for fish biologists seeking to reintroduce trout into harsh desert stream environments. Lahontan reside shiners also are found in these steams, which represent the northern-most extent of their range.

Diversity in the National Wilderness Preservation System

A. **Assessing the diversity of natural systems and features as represented by ecosystems:** Wilderness designation of this WSA would add an ecosystem not presently represented in Oregon, and represented in the National Wilderness Preservation System (NWPS) by 4 areas. There are 67 other BLM areas in the State under study with this ecosystem, and the example in this WSA is judged to be among the most natural of the areas studied in this State. The information is summarized in Table 2.

Table 2
Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas Areas	 Acres	Other BLM Studies Areas	 Acres
	NATION WIDE			
Intermountain Sagebrush Province/ Sagebrush steppe	4	131,199	136	4,356,461
	OREGON			
Sagebrush steppe	0	0	67	1,983,074
	NEVADA			
Sagebrush steppe	2	86,907	34	1,252,990

B. Expanding the opportunities for solitude or primitive recreation within a day's drive (five hours) of major population centers: The WSA is within a five hour drive of two major population centers. Table 3 summarizes the number and acreage of destination areas and other BLM study areas within 5 hours drive of the population.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas Areas	 Acres	Other BLM Studies Areas	 Acres
Idaho				
Boise	16	4,741,570	141	5,347,290
Nevada				
Reno	45	4,967,230	175	6,904,809

C. Balancing the geographic distribution of wilderness areas: The WSA would contribute to balancing the geographic distribution of areas within the NWPS. There are few designated wilderness areas within the region. Seventy-seven study areas recommended for wilderness are within 100 miles of this WSA.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The area recommended for wilderness is manageable as wilderness. The WSA possesses a high degree of naturalness and is large enough to provide a core area to ensure the availability of wilderness values. Manageability would be improved by the acquisition of private inholdings and the mineral estate of the split estate lands, and closure of the boundary road between the Willow Creek and Disaster Peak WSAs. The acquisitions would prevent adverse effects from access to and incompatible surface disturbance on these parcels. Closure of the boundary road would make a much larger roadless area, decreasing the conflict with motorized vehicles and wilderness users. The addition of 150 acres that are adjacent to the WSA (the area to the west of Sherman Field) to the area recommended as wilderness would improve manageability by adjusting the boundary to a more easily defined location. This area was added to improve the configuration of the WSA. Solitude would be enhanced by less disturbance along ways and roads that would result from closure of the 17 miles of ways, all eight of the dead-end roads which total approximately 10 miles, and two boundary roads that total 7 miles. Acquisition of the 1,280 acres of private land and the mineral estate on 1,450 acres would eliminate the possibility of additional influences from access and development.

The area recommended for uses other than wilderness is not manageable as wilderness. The 2,400 acres are in an area that has a narrow configuration (a boundary projection in the southern portion of the WSA) or fall within an Area of Critical Mining Potential (the eastern portion of the study area). There are conflicts with oil, gas, geothermal, mineral and range development projects. Adverse impacts to wilderness values would occur as a result of 800 acres of surface disturbance in association with projected development of a gold mine. In addition, the boundary extension detracts from manageability because it provides limited opportunities for solitude. The southern-most extension is narrow and the eastern portion has open slopes and low brush cover.

Energy and Mineral Resource Values

The energy and mineral resources of the Disaster Peak WSA were evaluated from available geologic data supplemented by a limited amount of geochemical stream-sediment sampling by the Oregon Department of Geology and Mineral Industries (DOGAMI) and by Barringer Resources, Inc., under BLM contracts. DOGAMI evaluated the energy and mineral resources of that portion of the WSA situation in Oregon, and Barringer Resources, Inc. evaluated the energy and mineral resources of that portion in Nevada.

Technical details of the DOGAMI evaluation are incorporated in a report titled "Geology and Mineral Resources of 18 BLM Wilderness Study AReas, Harney and Malheur Counties, Oregon." Technical details of the Barringer Resources, Inc. evaluations are included in a report titled "Geochemical and Geostatistical Evaluation of Wilderness Study Areas, Winnemucca District, Northwest Nevada." Using these evaluations, a heavy mineral analysis by Barringer Resources in 1984, and new information, the mineral potential of the Disaster Peak WSA was revised during 1987.

Approximately 2,400 acres in the eastern portion of the Disaster Peak WSA is an Area of Critical Mining Potential (ACMP). An ACMP is an area of existing or de facto withdrawal from mineral development that has been nominated by members of the public as having mineral potential that is important to the local, regional or national economy, or that could be important in the future. Much of the Tertiary volcanic material in the Disaster Peak WSA appears to have originated from one large, apparently extinct, volcanic center: McDermitt Caldera, located along the southern and southeastern margins of the WSA. This volcanic center has greatly influenced the geologic characteristics of the WSA and has contributed to the formation of several mineral occurrences.

Based upon indirect evidence (e.g., known occurrences in above normal concentration) the entire WSA is considered to have moderate potential for the occurrence of oil and gas. However, there has been no deep drilling, and as of October 16, 1987 there were no oil and gas leases in the WSA.

Also based on indirect evidence, portions of the WSA are considered to have a moderate potential for the occurrence of uranium/thorium. As of October 16, 1987, there were no mineral leases in the WSA.

No economically minable deposits have been discovered in the WSA; however, gold and mercury are known to occur in portions of the study area. Fairly substantial amounts of gold occur in the eastern portion. Based on this direct evidence, the eastern portion of the WSA is considered to have a high potential for the occurrence of gold.

Based on direct evidence, portions of the WSA are considered to have a moderate potential for the occurrence of lithium bentonite and zeolite. Also based on direct evidence, there is moderate potential for beryllium and mercury, in portions of the study area. As of October 16, 1987, there were 35 mining claims located in the eastern and southern portions of the WSA for a total of 705 acres. However, no economically minable locatable energy (i.e., uranium/thorium) and/or mineral resources have been discovered on the claims. there is no present production of any mineral or geothermal resources in the Disaster Peak WSA. In summary, quantities of various minerals are unknown, but potential for occurrence is moderate to high in several parts of the WSA, as identified in the mineral report.

The U.S. Geological Survey and U.S. Bureau of Mines evaluated 30,195 acres of the study area for mineral resources and mineral resource potential. According to the report, "Mineral Resources of the Disaster Peak Wilderness Study Area, Harney and Malheur Counties, Oregon, and Humboldt Country, Nevada," no resources were identified within the study area. There is high and low potential for gold resources in quartz veins in the southern part and low potential for epithermal gold, silver, mercury, and uranium resources in the northeastern part of the study area. The WSA has no potential for sand and gravel, oil and gas, or geothermal energy resources.

Impacts of Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered including designation and nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action Partial Wilderness	All Wilderness	All Wilderness with Acquisitions	No Wilderness No Action
Impacts on Wilderness Values	Wilderness designation of 31,170 acres (with acquisition of 1,280 acres of private land, the mineral estate of 1,450 acres of split-estate land and an additional 150 acres of non-WSA public land adjacent to the WSA) would protect and enhance existing wilderness values. On the 2,400 acres recommended for uses other than wilderness, projected activities would directly impair wilderness values on approximately 3,000 acres with further declines from other potential uses over the long term.	Wilderness designation of the entire area (32,040 acres) would protect and enhance existing wilderness values.	Wilderness designation of 33,320 acres would protect and enhance existing wilderness values.	In the absence of wilderness designation, projected activities would directly impair wilderness values over approximately 2,400 acres of the WSA, with further declines from other projected uses over the long term.
Impacts on Energy and Mineral Exploration and Development	No impact to energy development is expected, since none is projected. Production of gold, silver and mercury from four projected mines, bentonite from one projected mine and zeolites from one projected mine would be foregone. Production could occur from one projected gold mine in the nonwilderness area.	No impact to energy development is expected, since none is protected. Production of gold, silver and mercury from four projected mines, bentonite from one projected mine and zeolites from one projected mine would be foregone.	No impact to energy development is expected, since none is protected. Production of gold, silver and mercury from four projected mines, bentonite from one projected mine and zeolites from one projected mine would be foregone.	No impact to energy development is expected, since none is protected. Production of gold, silver and mercury from four projected mines, bentonite from one projected mine and zeolites from one projected mine would be possible.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action Partial Wilderness	All Wilderness	All Wilderness with Acquisitions	No Wilderness No Action
Impacts on Recreation Use	The area's recreation use level of about 1,200 visitor days per year would not be affected.	The area's recreation use level of about 1,200 visitor days per year would not affected. Wilderness designation would result in a change to primitive, non-motorized types of recreation use.	The area's recreation use level of about 1,200 visitor days per year would not affected. Wilderness designation would result in a change to primitive, non-motorized types of recreation use.	The area's recreation use level of about 1,200 visitor days per year would not be affected.
Impacts on Vegetation	Revegetation would occur on 17 miles of roads and 17 miles of ways in the area designated. Riparian vegetation would be improved along 16 miles of streams. In the nonwilderness area, development of an open pit gold mine would result in long-term removal of vegetation on 800 acres and degrade 5 miles of riparian vegetation.	A total of 18 miles of ways would be closed and would revegetate in 3 to 5 years. Riparian vegetation would be improved on approximately 16 miles of streams.	17 miles of roads and 18 miles of ways closed would revegetate. Riparian vegetation would be improved on about 16 miles of streams. Upland range condition would improve.	Long-term removal of vegetation is anticipated on 1,885 acres from development of 5 open pit mines and 1 underground mine. 10.5 miles of road, which would be upgraded to provide access to the mines, would remain unvegetated due to continued use. About 5 miles of riparian habitat degradation is projected from mining developments. Riparian vegetation would be improved along approximately 10 miles of riparian communities. Upland range condition would improve.
Impacts on Livestock Grazing	Livestock use would remain approximately 6,268 AUMs. In the area recommended for wilderness, vehicle use for livestock management and facility inspection/ maintenance on 17 miles of ways and 17 miles of roads would be precluded. Two miles of fence would be constructed in the WSA to improve riparian vegetation on 16 miles of streams through a change in grazing management.	Livestock use would remain at 6,268 AUMs. Vehicle use for livestock management and facility inspection/maintenance on 18 miles of ways would be precluded. Two miles of fence would be constructed in the WSA to improve riparian vegetation on 16 miles of streams through a change in grazing management.	Livestock use would remain at 6,268 AUMs. Vehicle use on 18 miles of ways and 17 miles of roads would be precluded. Two miles of fence would be constructed in the WSA to improve riparian vegetation on 16 miles of streams through a change in grazing management.	Long-term surface disturbance of 1,885 acres due to mineral development would decrease the forage allocation to livestock by 45 AUMs to an overall use level of 6,223 AUMs due to mining activity. Vehicle use for livestock management and facility inspection/maintenance on 18 miles of ways and 17 miles of roads would continue.

Table 4 Continued
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action Partial Wilderness	All Wilderness	All Wilderness with Acquisitions	No Wilderness No Action
Impacts on Wildlife	Wildlife habitat for mule deer, antelope and the WSA's nongame species would be improved in the area designated wilderness. In the 2,400 acre nonwilderness area, projected development of one open pit gold mine would permanently disturb 800 acres and displace wildlife in the vicinity of the mine. A population of Lahonton trout may be jeopardized if water quality in the creek deteriorates as a result of the mining activities.	Wildlife habitat and populations would be maintained on 32,040 acres.	Wildlife habitat and populations would be maintained on 33,320 acres.	Activity related to projected mineral exploration would cause temporary wildlife displacement and habitat losses with construction of 59 miles of access roads and 132 acres of surface disturbance. The cumulative impact of mineral exploration on big game habitat would be substantial. Activity related to mineral development would cause long term habitat losses on 1,885 acres. During mineral development activities, mule deer, and game antelope would be displaced into adjoining suitable habitats due to direct habitat losses and disturbance by human activities, cutthroat trout populations could be harmed if mine drainage leaks into streams.
Impacts on Watershed	800 acres associated with mineral development would cause long-term effects on approximately 5 miles of perennial streams in the area not designated as wilderness. Watershed condition would improve on 10 miles of streams.	Construction of 2 miles of pasture fence would improve through better livestock management. Watershed condition would improve on 10 miles of perennial streams.	Construction of 2 miles of pasture fence would improve through better livestock management. Watershed condition would improve on 10 miles of perennial streams.	Surface disturbance associated with mineral development would cause long-term degradation on approximately 5 miles of perennial streams. Construction of 2 miles of pasture fence would improve watershed condition through better livestock management on 10 miles of streams.
Impacts on Local Personal Income	Annual local personal income would remain at approximately $62,600. There would also be an unknown level of increase attributable to the projected mineral development.	Annual local personal income would remain at approximately $62,600.	Annual local personal income would remain at approximately $62,600.	Annual local personal income would decrease by approximately $600. There would also be an unknown level of increase attributable to the projected mineral development.

Local Social and Economic Considerations

Annual local personal income generated from resource outputs in the WSA would remain at approximately $62,600. there would also be an unknown level of increase attributable to the projected mineral development. There were no social issues identified with the study of this WSA.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain public input received during the inventory process and early stages of the EIS preparation were used to develop significant study issues and various alternatives for the ultimate management of those lands found to have wilderness values.

During formal public review of the draft EIS and the supplement to the draft EIS, a total of 14 comments specifically addressing the Disaster Peak WSA were received. Of those, nine commentors supported wilderness designation for all or part of the WSA. Five commentors supported no wilderness for the WSA.

Commentors against wilderness cited that the land is rich in minerals, objections to private property being acquired, and that road closures could put restrictions on grazing use and decrease the value of ranch operations.

Those against the recommendation said that wilderness designation would cause conflicts with the interests of private landowners in regard to cattle grazing operations, that the recommendation does not include adequate watershed protection, and that emphasis was given to unproven mineral potentials and the split-estate if that is necessary to protect wilderness character. Those in favor of all wilderness supported closing all roads and acquiring private land, and said that wilderness values of the area outweigh its mineral potential. Also cited were high wilderness values of the WSA, including the threatened trout species, ecology and recreation opportunities, solitude, and wide diversity of plant and aquatic communities.

No WSA-specific comments were received from any federal, state or local agencies.
The State of Nevada has indicated to the Nevada BLM State Office that it objects to any proposal which includes closures of existing roads.

There were two comments letters received on the final EIS specific to this WSA. They supported the all wilderness alternative.

APPENDIX 1

ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION[13]

Legal Description	Total Acreage	Number of Owners	Type of Ownership by Estate		Presently Proposed for Acquisition	Preferred Method of Acquisition	Estimated Costs of Acquisition[14]	
			Surface Estate	Sub-Surface Estate			Land	Processing
Parcel #1 T.41S., R.38E., MDM, Sec. 16	540	1	Federal	State	No	Exchange		$15,000
Parcel #2 T.41S., R.38E., MDM, Sec. 8	90	1	Federal	Private	No	Purchase	$1,500	$2,000
Parcel #3 T.40S., R.38E., MDM, Sec. 36	640	1	Federal	State	No	Exchange		$15,000
Sec. 35	40	1	Federal	State	No	Exchange		$15,000
Sec. 25	40	1	Federal	State	No	Exchange		$15,000
Parcel #4 T.40S., R.38E., MDM, Sec. 26	40	1	Private	Private	No	Exchange		$10,000
Parcel #5 T.41S., R.38E., MDM, Sec. 10	200	1	Federal	Private	Yes	Purchase	$90,000	$15,000
Sec. 11	280							
Sec. 14	320							
Sec. 15	160							
Sec. 22	80							
Sec. 23	200							

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[13] The estimated costs listed in this Appendix in no way represent a formal appraised value of the land or mineral estate, but are rough estimates based upon sales or exchanges of lands with similar characteristics to those included in the WSA. The estimates are for the purpose of establishing a range of potential costs to the government of acquiring non-federal holdings and in no way represents an offer to purchase or exchange at the cost estimates included in this appendix. Processing costs are all miscellaneous expenses other than land costs. These include workmonth costs, appraisals, title work, escrow costs, etc. All lands identified in this table are in Oregon.

[14] Where exchange is the proposed method of acquisition, only administrative costs of processing the exchange are shown. Land costs would not be applicable. Where direct purchase is proposed, estimates of both the land costs and the processing costs are provided.